

JPRS-EEI-84-098

30 August 1984

# East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS



FOREIGN BROADCAST INFORMATION SERVICE

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30 August 1984

## EAST EUROPE REPORT

### ECONOMIC AND INDUSTRIAL AFFAIRS

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COMPLAINTS ABOUT IMPROPER DISTRIBUTION OF PRIVATE PLOTS

Sofia KOOPERATIVNO SELO in Bulgarian 13 Jul 84 p 2

[Text] A great part of the letters, complaints, and signals from agricultural laborers are related to land for private use. It is alarming that 60-70 percent of them are legitimate. The greatest number of complaints have come lately from the Vratsa, Pleven, Kyustendil, Lovech, and some other okrugs. There are different reasons for this, among which the following can be seen as predominant:

- 1) Arbitrary, personal, and groundless activities on behalf of individual leaders who do not recognize and brutally eliminate the right of owning private land by authorized persons, or who grant land to others who are not in a position to own such land. Being able to own private land or not, and in different amounts, depends on their "ego," their "good will," or their "gesture." "You are not going to get any land until I am in a certain position..." farmers from the Komuna agroindustrial complex in Cherven Brag, and from the agroindustrial complexes in Krivodal and Borovan, in Vratsa Okrug, and other complexes write to us in their complaints.
- 2) Illegal and unconstitutional decisions of the Administrative Council of the agroindustrial complexes, made at general meetings, in private land regulation handbooks. The primary source of these violations is a subjective factor that has not been hidden behind the "screen" of the resolution. Only one principle in this category is used for the sake of "soothing" those concerned that the resolutions are being applied to everyone. The agroindustrial complex in Byala Slatina is a typical example of that--sanctions should be imposed on those owners of private land who have not turned in 50 kilograms for communal livestock breeding. Unconstitutional decisions with respect to private land use exist in the Khayredin agroindustrial complex in Vratsa Okrug.
- 3) The size authorized for private farms is reduced willfully in order to create a certain reserve for public construction. This is also confirmed by the massive slowdown in, or non-fulfillment of, the instructions prescribed by the higher organizations concerning legitimate complaints of the citizens.

The high percentage of legitimate complaints, letters, and signals shows that brutal violation of the law is being permitted, that normative ordinances for

carrying out party policy on developing and establishing private farms as a natural continuation of public farming and essential reserves for the production of additional agricultural output are either not well known or are evaded.

The verification of complaints and signals shows other negative phenomena as well. We will point out two more:

Unscrupulous citizens misappropriate land from public farms--at the agroindustrial complex in Bratsigovo, Pazardzhik Okrug, the agroindustrial complex in Troyan, Lovech Okrug, agroindustrial complex in Provadiya, Varna Okrug, and others.

The second one is related to citizens who have a "hobby" of writing even if their complaints are groundless. They do not know how to take into consideration the well-founded, lawful answer of the first authority and continue to write to all higher administrations and media.

What are the changes and new formulations in the Model Statute for the brigades, the amendments and supplements to the Model Statute for agroindustrial complexes and okrug agroindustrial unions?

#### Right to Land

According to Article 68 of the Model Statute for agroindustrial complexes, those families employed in agriculture, which work a minimum number of work-days, determined by the General Assembly of agroindustrial complexes, and the families which have retired in this field, have the right to land, provided that they live on the territory of the appropriate agricultural organization. Such a right is acquired by retirees from other fields too, provided that they have worked in the production of the agroindustrial complex during the last 5 years prior to their retirement, or they live on the complex's territory after retirement.

In compliance with the amendments and supplements of the Model Statute for agroindustrial complexes and okrug agroindustrial unions, and the new Statute on Brigades (published in DURZHAVEN VESTNIK, Nos 36 and 37 for 1984), the following persons have the right to private use of land:

- 1) Disabled people, who were injured on the job, and generally ill at the agroindustrial complex, temporarily disabled and those on maternity leave, not having to participate in agricultural activity at the agroindustrial complex, under the conditions and regulations of the Statute on Private Farms, adopted by the General Assembly (article 69, paragraph 2 of the Model Statute for agroindustrial complexes).

- 2) For those who work in okrug agroindustrial unions, the land is provided by the members of the agricultural organizations (article 29, paragraph 2 of the Model Statute for agroindustrial unions).

3) Members of brigades also have the right to private farming together with their families (article 4, point 2 of the Model Statute for brigades).

#### Amount of Land

This has been determined by the General Assembly, depending on the rayon--intensive, grain producing, mountainous--up to 5 decares. The Statute on Private Farms defines the latter by taking into consideration the category of the land, the labor participation, number of family members, etc. In accordance with the formulations of the statute on private land use (article 13 of the Model Statute on Brigades).

#### A Privilege Which Is Not Transferable by Inheritance

According to the resolution of the General Assembly, reduced amounts of private land for farming are given to:

1) People who have a paid, elective office or public office--president or vice president of oblast people's councils, mayor, secretary of a municipal party committee, president of a Fatherland Front Committee, president of the Bulgarian National Agrarian Union, secretary of a Komsomol association, president of a trade union committee, president of a village cooperative, etc.

2) Other office functionaries who live on the territory of the agroindustrial complex, under the condition that they participate in agricultural production in their free time, as they accumulate a minimum number of workdays, determined by the General Assembly.

There is the praiseworthy initiative of a large part of the leadership of the agroindustrial complexes, which offer seed on a small scale for the personal use of teachers, doctors, dentists, and mid-level medical personnel living and working in the villages.

#### Reduction and Deprivation of Land

For failure to preserve equipment and labor discipline, and for other infractions of the regulations and rules on internal order at the agroindustrial complexes and in brigades, land can be decreased. According to the decision of the General Assembly, land can be decreased as a sanction in case separate private farms refuse to cultivate, in a family agreement, some labor consuming strategic crops, such as tobacco, sugar beets, and others. In the case of more serious violations, a complete revocation of the land allocated for private use could be used as a sanction. It can also be taken away from persons who do not use it according to its designation for the production of agricultural products, loaning it to other parties, hiring paid workers, or losing their right to own private land.

For a correct and legal resolution of private land use questions, we offer the following:

The National Agroindustrial Union should endorse an ordinance on private farms for workers and employees in agriculture, on the basis of which statutes on private farms at agroindustrial complexes and other agricultural organizations should be developed.

The statute on private farms should be coordinated in advance with the okrug agroindustrial unions, and after they are adopted by the General Assembly, they should be registered at the okrug agroindustrial unions in order to be brought into timely compliance with the normative ordinances.

Okrug agroindustrial unions should improve their control over and seek to have personal responsibility ascribed to the appropriate office functionaries who have created conditions or allowed violations of normative ordinances related to the development of private farms.

12334

CSO: 2200/156

REACTION TO U.S. SENATE DECISION ON TRADE WITH BULGARIA

Sofia ANTENI in Bulgarian 11 Jul 84 p 11

[Article by Todor Vulchev, director of economic sciences: "An Inimical Act"]

[Text] An amendment to the budget bill adopted by the United States Senate has been received by Bulgarian citizens, even those who are not very interested in international politics, as an undeserved act of enmity, directed against their native land and Bulgarians themselves.

But let us look at the question from an economic point of view. For now it is not clear to what extent the "amendment to the budget bill" of the United States will affect the amount of trade between the two countries. If the formulation published, that "it is forbidden for the Department of Commerce and the State Department to allocate means for developing trade relations with the Bulgarian People's Republic," is accurate and will be retained, it could be expected that the mutual relations which now exist between Bulgarian and American firms will not be affected in most essential ways.

The amendment forbids both departments from using state funds for stimulating trade with our country. That means Bulgarian and American enterprises will not have the right to various concessions, subsidies, assistance, and loans which have been introduced in the United States. These include, for example, insurance for claims and investments abroad in case of political and commercial risks, export subsidies for agriculture and other products, loans from the United States Export-Import Bank, and others.

The revocation of these concessions represents, naturally, a hindrance to the development of mutual trade and is an act of discrimination directed against our country. However, conditions up to now have been approximately the same.

It is extremely important how the United States Administration will approach this problem, and if, at a given moment, it will not try to exceed its rights and bring about some pressure on business interests to limit their ties to Bulgaria. There are grounds for such reservations. Business interests have displayed vital interest in cooperating with Bulgarian enterprises, which was recently confirmed at a meeting in Sofia in May of this year. Contrary to these interests, representatives of the administration have always been more reserved and even a little inimical, despite the fact that the Secretary of Commerce, Mr Baldrige, greeted the conversations in Sofia.



In regard to the volume of trade, it is not significant. According to statistical data, published officially here, Bulgarian exports to the United States have recently reached around 40 million hard currency leva annually, which represents less than 0.5 percent of the entire export from the Bulgarian People's Republic. The amount imported is larger, between 0.7 and 1 percent. During 1981 alone, when we imported greater amounts of fodder grain and soy groats, the share reached 2 percent. It is clear that, in terms of size and value, trade between Bulgaria and the United States cannot have decisive importance for the economic development of our country. Moreover, raw materials prevail in its structure, rather than the so-called high technology, whose share is rather small.

But still there is no place for disparaging the relationship. The Bulgarian people highly esteem American technology and science. Our country has always aspired to broaden our economic ties with the United States. And if substantial progress has not been registered, the reasons are not to be found here or among American business interests, but primarily in the foreign policy of the United States.

Evidence for this is the fact that during the period of detente, trade (general import and export) between Bulgaria and Western Europe reached 3 billion hard currency leva, while with the United States it remained at the level of 100 million (with certain exceptions in individual years).

It is true that in addition to trade relations with the United States, we need to take into consideration contacts with the branches of American companies abroad. If these relations are affected by the "amendment to the budget bill," negative consequences could increase. It is well known that leading circles in the United States aspire to extend the effect of American laws to American firms overseas and even to foreign companies which operate under American licenses. Western European nations, however, categorically reject these pretensions, since they undermine their state sovereignty.

The United States Senate's decision essentially represents an instance where economic sanctions are applied to attain political goals. There are different points of view on this matter in the West. In Western Europe, which is interested in supporting trade with the member countries of the Council for Mutual Economic Assistance (now reaching 70-80 billion dollars annually), the prevailing opinion is that sanctions directed against socialist countries are an ineffective weapon. The American administration, it seems, has not refused to use these means, despite the fact that they have frequently experienced failure.

Despite the fact that we are speaking about sanctions against one individual, relatively small country, and a limited amount of trade, the case is symptomatic. It shows that the Reagan government has not renounced its goal of limiting (and if possible doing away with altogether) economic relations between capitalist and socialist countries.

The Senate's resolution, which is inimical in regard to Bulgaria, is not yet in force. It could be softened, limited in time, or best of all, it could be dropped entirely. Business interests, ordinary people, and the cause of peace on earth would gain by this.

# RESULTS OF NEW ECONOMIC MECHANISM IN STARA ZAGORA OKRUG

Sofia IKONOMICHESKI ZHIVOT in Bulgarian 18 Jul 84 p 3

[Article by Candidate of Economic Sciences Dobri Barakov, deputy chairman of the Stara Zagora Okrug People's Council Executive Committee: "Fuller Use of Economic Levers"]

[Text] The changes in the economic mechanism, based on Comrade Todor Zhivkov's report note to the BCP Central Committee Politburo and the resolutions of the party's January 1984 plenum, laid the foundation for further improvements in economic management in Stara Zagora Okrug. Measures, which are being successfully implemented, were formulated in order to create the necessary conditions for the practical application of the mechanism. Several task forces were set up to investigate the main enterprises. These groups include specialists from the okrug bank branch, the okrug labor inspectorate and the planning and finance administrations of the okrug people's council. Specialists from the investigated enterprises were included in the groups.

The study of the results for the past 3 months showed that the state assignment for the net output was overfulfilled by more than 21.3 million leva; the overall profit plan was overfulfilled by more than 19.2 million leva and social labor productivity was exceeded by 4.5 percent. Material outlays per 100 leva commodity output were lowered by 0.9 percent.

Regardless of such positive results, the criteria set at the October 1981 national conference were not met. Compared to the same period in 1983, the growth of social labor productivity was 0.3 percent below the growth of the average wage. The investigations revealed that there were nearly 1,200 workers above the number stipulated by the plan, which was caused by the implementation of bigger production assignments. A number of enterprises failed to fulfil their 3-month plan.

Specialists in the area of "Income From the National Economy" of the okrug people's council checked 16 economic organizations and enterprises. Some of them are procuring the necessary funds for self-financing of current activities. Sufficient assets are being withheld for the various funds and accounts with the budget and suppliers are settled promptly. However, the Nataliya Plant in Stara Zagora and Energoremont in Gulubovo are not providing funds for self-financing of current activities. The former failed to fulfil its assignment



for the balance sheet profit and developed above-norm reserves; the latter had all its assets taken by the Energoremont SO [Economic Trust] with the exception of the assets of the Sociocultural Measures Fund. Although the ratio between the growth of social labor productivity and the average wage was maintained for the okrug as a whole, it was violated in almost 30 enterprises. The main reasons were the nonfulfillment of the plan in terms of volume and marketing, cost overruns and larger staffs.

Let us point out, however, that no new aspects in the application of the brigade piece-rate method were introduced. Many enterprises are improperly applying the stipulations of Article 190, Paragraph II, Point 1 of the Regulation on the Economic Mechanism. The wage fund earned by the brigade is not being distributed among brigade members and wages are paid and recorded as earned wage fund, as a result of which higher wages are being paid compared to the earned amounts in terms of norms and rates. This results in over-expenditures of the wage fund and in violating the planned ratio between the growth of social labor productivity and the average wage. In other cases, production units are paid less than what they have earned with a view to procuring funds for the administrative and managerial personnel.

The lack of substantiated outlay norms and standards, mostly for basic and auxiliary materials, is creating difficulties in the application of the brigade cost accounting method. In order to surmount them, the okrug organized a review of the brigade organization of labor. Its purpose is to update plans for the development of new type brigades in accordance with the criteria issued by the National Party Conference and the party's long-term quality improvement program.

It would be expedient to reconsider some stipulations in the Regulation on the Economic Mechanism. In order to observe the stipulations of Article 194, Paragraph 1, of the regulation and to prevent shortages in the wage fund, the economic organizations must mandatorily submit the reports on relating the resulting wage fund in accordance with the plan to the servicing bank branch. The average percentage of growth of the average wage of employees must not exceed the average percentage of the workers. The item "Personal Rewards for Resolving More Important Problems" must be used in making payments to employees and workers in proportion to the wage fund by personnel category. The individual wages of management cadres and specialists working in production units (brigades) must be mandatorily determined on a monthly basis. The norm, in accordance with the stipulations of Article 190, Paragraph II, Point 2, of the regulation on the administrative personnel must be accomplished identically for all economic organizations and enterprises. It must be determined on the basis of the state assignment for the overall profit for the year and the size of the stipulated amount for the same year.

The stipulated penalties for exceeding the size of the staff are virtually not applied. However, the fact that the economic mechanism is already in operation is confirmed by the fact that for the reason cited above 350 managers and specialists had their salaries lowered in 7 okrug enterprises. This, however, is not all. The investigations made so far on the observance of

internal rules and regulations on the organization of wages established that they were not drafted in accordance with instructions. Articles from the regulation were simply duplicated without reflecting the specific characteristics of the organization of wages at the enterprise. After instructions on the application of Article 16 of the Regulation on the Economic Mechanism were issued, most of the enterprises updated their internal regulations and ensured a more effective material incentive. After the latest instructions which were issued by the Committee on Labor and Social Affairs and the Bulgarian Trade Unions Central Council, these regulations were updated once again. The latest investigation revealed that 11 percent of the okrug enterprises had made their internal regulations consistent with the new requirements; 41 percent had undertaken their updating and 48 percent were still idling. One of the reasons for such delays is a delay in making changes by the superior organizations and difficulties in practically regulating the changes in internal regulations.

Difficulties are encountered in the practical application of Article 33, Paragraph II, Point 2 of the Regulation on the Economic Mechanism, for in determining quality comparisons with the best models--world accomplishments--are not always made and a great deal of the current standards lead the producers to the manufacturing of average-quality goods. The standardization documents insufficiently reflect all possible quality indicators. Furthermore, standardization must be comprehensive, i.e., there must be unity in requirements concerning the quality of raw materials and complementing items, and the development and packaging of new products. A uniform method must be developed for the entire country, similar to the Korter method, in relating prices of commodities to their qualitative evaluation.

The fact that there is more demand than supply for some mass-produced goods creates certain difficulties for the price setting organs to penalize lower quality goods, for this would adversely affect the level of consumption.

We must admit that the economic mechanism is difficult to apply in many enterprises. This is due to the level of skill of their cadres. Frequent changes must be made in the basic indicators due to changes in the production structure, increased personnel, the elimination of old and undertaking new activities, etc. The possibility should be sought to simplify the addenda to the mechanism, such as Reference 1, On Computing the Maximally Possible Wage Fund and the Regulation on the Average Wage; all that should remain is the system on the basis of which income is formed and distributed. Some thought could be given to deleting the concept of "shortage of resulting wage fund" and making payments exclusively within the framework of the resulting-residual fund. We must also stabilize the legal regulation of the economic mechanism so that it may reach the direct producer and so that its application may be a matter not only for leading cadres and specialists but the entire labor collective.

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CSO: 2200/163

PROGRESS IN HARVEST, FARMING ACTIVITIES ASSESSED

Sofia KOOOPERATIVNO SELO in Bulgarian 11 Jul 84 p 1

[Article by Rumyana Penkova: "Success Depends on Good Organization"]

[Text] Beginning on 12 July, Burgas, Vratsa, Mikhaylovgrad, Vidin, and Pleven okrugs will receive additional transportation means. The latter, however, will be taken back at the first sign of the slightest disorder in their organization and use.

There is a shortage of tomato packing material in Plovdiv, Khaskovo, Pazardzhik, and in other okrugs as well. Or, as they say at Bulgarplod, "the situation is disastrous," "tomatoes are sitting at the harvesting locations and there is nothing to take them away in." What will the enterprises of the Stara Planina State Economic Trust do right now, immediately?

The supply of polyethylene has improved a little bit since the beginning of July. However, the situation is still serious in the Yambol, Khaskovo, Kurdzhali, and Blagoevgrad okrugs. Will the Ministry of Chemical Industry help?

At the Harvest Headquarters

In most of the grain-producing okrugs, barley has already been harvested; they are still working on this harvest now at the high altitude areas only. If we admit that this is the first stage of the summer campaign, we ought to know where we are, and most important of all, how we got there. We ought to examine any shortcomings, so that we can avoid them in the future, because there is no transition time--the harvesting of wheat is at its peak now. How do we prepare for the end of the campaign?

The harvest is going along at a fine pace. It was interrupted briefly by a few clouds during the last few days, but these summer clouds quickly passed by. There are no significant complaints from the combines thus far. The detachment from the Machine Tractor Station and the Struggle Against Erosion State Economic Trust has proved to be good helpers. So far, so good, but what will happen next?

The arrangement and coordination of the rest of the unit groups in the mechanized detachment is not as it should be everywhere. Why? Because

there are okrugs which are lagging behind in harvesting straw, and thus they are delaying the sowing of second crops, wasting precious time.

Why is stacking hay significantly lagging behind, compared to the harvest? There are different reasons for this: there is a shortage of mechanic-operators in some places, transportation means at others, and at yet other places, the organization is simply not very effective. There is a shortage of trucks in Burgas Okrug, and though something has been done about it in the last week, there are still not enough. It is the same in Pleven Okrug. In Vratsa Okrug technological transportation means are being used and the grain is being shipped to the facilities of the Consolidated Plants for Fodder Production. It is true that alfalfa is being mown right at this moment, and the hay is being stacked. But how can sowing take place until the straw is removed?

There is a shortage in the labor force at some places, too--in terms of taking up and carrying away the straw, separating the grain from the chaff, cleaning the grounds. It is certain, however, that communal people's councils, special organizations, and the Komsomol can all help in organizing the brigades within the village systems; they helped with the transportation means, too. Because this year there is some straw, which is also a crop; not a little, but not much either. Therefore, it should not be wasted and strewn around.

Although these are changes for the better, we cannot say that irrigation has reached a turning point. The light rains that sprinkled here and there came more as an excuse, as grasping at straws. They destroyed the irrigation organization. With a few exceptions, there is no night irrigation around the country. There are people, there is water, and yet there is no irrigation. Many instances show that everything depends on people, on the organization they create; for example--how is it possible that agroindustrial complexes in Burgas, Pomorie, and Nesebur irrigate around the clock, whereas at other complexes they do not? In Varna Okrug they do not use the water overnight, the same is true in Vratsa, Mikhaylovgrad, Pleven, and Yambol okrugs. How do they succeed in Plovdiv and Ruse okrugs?

The deadline for sowing second crops is expiring--for southern Bulgaria, 10 July; for northern Bulgaria, 15 July. The operational data which we publish show quite precisely who is complying with the deadlines and how. The planned amount of corn for fodder is short 500,000 decares. There is enough moisture in the soil, however. Good farmers should not overlook, at any rate, the great opportunity for supplementing the animals' feed troughs for next winter.

Just now some okrugs will remember, with an unpleasant feeling, a letter from the beginning of May, which reminded them about the resolution of the Executive Committee of the National Agroindustrial Complex about strict sanctions on those agroindustrial complexes and okrug agroindustrial unions which do not produce and do not ship alfalfa flour on schedule to the warehouses of the Consolidated Plant for Fodder Production. This resolution reads that the sanction could also mean a complete halt in combined fodder

for all kinds and categories of animals. It seems that it is high time for the Grain and Fodder Industry Economic Trust to fulfill the Executive Committee's resolution. The future does not look bright for the animals in Burgas, Varna, Veliko Turnovo, Kyustendil, Lovech, Mikhaylovgrad, Plovdiv, Turgovishte, Khaskovo, and Shumen okrugs. The second alfalfa cutting has been harvested in more than 10 okrugs, and the quantity of alfalfa flour produced is half of what was planned.

At the same time, the selling of fodder grain should continue at state warehouses to pay off in-kind loans. The purchase of fodder grain should end by 25 August, and bread grain should be sold by 15 August.

The purchase of wheat by hybrids is at its very beginning. However, there are many signals of concern about quality standardization. The Grain and Fodder Industry Economic Trust insists that there are no reasons for alarm, that it will explain the purchase regulations one more time. It should by no means allow the dissolution of the agroindustrial complexes and warehouses; the shipments should not be mixed up at all. Let us remind everyone one more time: the bonus for strong wheat is 30 leva per ton, and for wheat in the second group it is 13 leva, which adds up to millions of leva. These millions could and should go to the producers' funds.

12334

CSO: 2200/156



## UNSATISFACTORY STATE OF ANIMAL HUSBANDRY, PRODUCTION OUTLINED

### Implementation of Quality Indicators

Sofia ZHIVOTNOVUDSTVO in Bulgarian No 6, 1984 pp 1-2

[Article by Docent Dr Mikho Semkov, BCP Central Committee Agricultural Department deputy manager]

[Text] The documents approved by the National Party Conference are of strategic importance in the development of our socialist society. The problem of the quality of output has become the center of attention in the activities of party, state, economic and public organs and organizations and has come to the attention of all labor collectives.

The requirements of the long-term program toward managers, scientific workers, specialists and workers in animal husbandry are quite strict and exceptionally important. Suffice it to mention that the forthcoming task is "...before the end of the 8th Five-Year Plan the share of animal husbandry products of first and extra quality must be the following: milk, 95-98 percent; fattened animals, 85-90 percent; and eggs, 85-90 percent. We must ensure the production of high-grade breeding stock with good genetic productivity qualities, such as more than 5,000 liters of milk per cow, 150 to 180 liters of milk per sheep, 240 eggs per laying hen and an average fertility per 100 head of breeding stock of 86-90 calves, 111-120 lambs and 1,700-1,800 pigs."

These high objectively determined targets are entirely possible and attainable in the years to come. As a result of the radical reorganization of the breeds and the developed biological potential for high productivity, the developed material and technical facilities and the rich experience gained in the organization and management of socialist animal husbandry, significant successes were achieved. Between 1960 and 1983 in the public farms milk production per cow increased from 1,843 to 3,458 liters; wool per sheep, from 2.55 to 4.394 kilograms and eggs per hen from 103 to 209. Within the same period production rose by 226 percent for milk, 288.2 percent for meat, 216.8 percent for eggs and 187 percent for wool. This was due above all to the increased average livestock productivity. In three okrugs--Razgrad, Ruse and Burgas--average milk production per cow exceeded 4,000 liters; in a number of APK [Agroindustrial Complexes] it exceeded 4,500 liters and in the leading farms and herds it ranges between 5,000 and 7,000 liters. Cow fertility in

two okrugs has exceeded 90 calves per 100 cows; in six other okrugs it exceeded 85 calves per 100 cows. For the country at large, however, average livestock productivity is low. In a number of okrugs and APK the growth rates are quite low.

The state of quality economic indicators is particularly alarming. Compared to 1970, in 1982 production costs were higher by 59 percent for cow milk, 116 percent for sheep milk, 73 percent for veal, 74.6 percent for mutton, 5.4 percent for pork, 58.9 percent for wool and 11.4 percent for eggs. It is quite obvious that this situation must be changed in a positive direction and in accordance with the strict requirements and criteria formulated by the 12th BCP Congress and the National Party Conference quickly and decisively. The long-term program clearly earmarks the main directions for an overall acceleration of production intensification and for upgrading the quality of animal husbandry products.

The main attention is focused on the rapid application of contemporary scientific and technical achievements in genetics, selection and reproduction, with a view to "creating and improving highly productive specialized breeds and hybrids of cattle, sheep, hogs and poultry, disease resistant and with a long useful life." Let us emphasize that in its basic aspects the policy of breed developments and production specialization by type of animal has been determined for the individual parts of the country and is being successfully implemented in many okrugs. Work on the development of beef cattle, dairy sheep breeding and specialized sheep breeding in mountainous areas is being unjustifiably neglected. Yet their development will enable us to make fuller use of natural and waste feed sources and will increase the production of livestock products.

The second important prerequisite is the use of modern feeding systems. Let us emphasize above all the role of corn silage in the wax-milk stage, with 35-45 percent dry substance, in which grain accounts for 38-45 percent of the latter. It is only such silage that yields more milk with reduced amounts of grain. In addition to dairy cows, the same silage is needed in fattening young cattle. The calf-raising farm in Kormyansko village, Gabrovo Okrug, assumed a leading position in terms of growth and production costs per 1 ton of output dropped below the norm after feeding the calves with corn silage in its full maturity.

In order to increase milk productivity and maintain the high reproduction ability of the dairy cattle, adequate amounts of high-quality haylage and dry hay must be procured. Any underestimating of this matter is quite costly. The main problem now is the production of high-quality fodder, beginning with agrotechnology, the phase and time for the harvesting of fodder crops and their storage and ending with their proper utilization.

Underestimating the quality of the fodder results in considerable losses. This is an almost ubiquitous phenomenon affecting all okrugs, but let us consider Kyustendil Okrug as an example. According to the fodder research laboratories, in 1983, in this okrug only 22 percent of the hay was first grade; 59 percent was second grade; 13 percent was third grade and 5.7 percent

was fourth grade; respective figures for the silage were 4 percent, 15.4 percent, 66 percent and 14.3 percent. Low-grade fodder has an unsatisfactory food value. Furthermore, it very frequently is rotten, moldy and infested with parasites and its use adversely affects the health of the animals.

Another major condition for improving the quality of animal husbandry products is the use of new technologies and the strict observance of technological discipline. The entire production process must be conducted on a high-quality level, along the entire chain from animals to purchasing organizations. A great deal has been done in recent years to improve the quality of the milk. Today virtually all farms have refrigerated containers, installations for machine milking with centralized pipes, milk testing laboratories, etc. The purchasing personnel must grade the animal husbandry output at the time of the purchase and inform the producer of any price discounts. This will create conditions for reducing the amount of watered or polluted milk, dirty or cracked eggs, defective wool or underfed or overfed animals.

The successful implementation of the strategic tasks included in the program adopted at the party conference depends to the greatest extent on the people who will organize the implementation of the objectives. Although the subjective factor has always been very important, it is of key importance in terms of production quality. As Comrade Todor Zhivkov emphasized at the conference in Varna, "high-grade output is impossible with uncultured, unskilled, ignorant and inexperienced cadres." This assessment applies to the greatest possible extent to animal husbandry cadres as well, both managers and performers. We know that most of them are highly skilled specialists who have contributed within a short time to enhancing our socialist animal husbandry to a contemporary standard through their extensive theoretical knowledge, rich practical experience and total dedication to the ideas of socialism. The present stage formulates new much stricter requirements, such as decisively improving cadre skills and training, particularly those of performers, those who are directly involved in producing the goods. It is of essential importance for cadres training to be highly practically concentrated, and to provide knowledge and skills to be applied in daily work without unnecessary theorizing.

The struggle for an upsurge in the quality of output sets exceptionally important tasks to specialists, zootechnicians and veterinarians. Their efforts must be directed toward the development of combat-capable labor collectives, the further enhancement of the awareness of animal husbandrymen and the development of a high feeling of personal and collective responsibility for results at each workplace, group, herd or livestock farm. A creative atmosphere must be developed and every farm specialist and worker must become engaged in specific efforts to improve the quality of animal output throughout all its stages.

Alongside the daily assignments, we must steadily increase requirements concerning discipline. Today it is becoming impossible to apply the achievements of the scientific and technical revolution without strict discipline in all its aspects--technological, production and labor. In describing its role, Comrade Todor Zhivkov said that this is "...not simply an economic matter. It



shows the level reached in molding a socialist individual and the level of his conscientiousness and responsibility to himself and to society and, in the final account, his attitude toward the socialist system."

### Improving Milk Quality

Sofia ZHIVOTNOVUDSTVO in Bulgarian No 6, 1984 pp 3-6

[Article by Senior Scientific Associate Mariya Petrova, Kostinbrod Animal Husbandry Institute]

[Text] In issues Nos 4 and 5 for 1984 we gave the floor to managers of scientific production and economic trusts and organizations to discuss the quality of livestock products they use as raw materials. Starting with this issue, we are publishing materials by noted scientific workers and production specialists, who will earmark ways and means, share their experience and issue specific recommendations for improving the quality of animal husbandry output.

Issue No 5 of this periodical carried an article on the quality of raw milk. The question of shortcomings in the milk delivered by some APK was justifiably raised.

What determines the content of a large number of microorganisms in milk? It is the result of the overall efforts to maintain necessary hygienic conditions. The most important thing here is the role of the person--the milkman, mechanic and operator and the other members of the collective, with their professional skills and ability strictly to observe technological discipline.

A number of authorities consider the bacteriological-hygienic quality of the milk obtained with milking machines unsatisfactory. This is due mainly to the violation of cleanliness regulations in milking and to insufficient cleaning and disinfection, which greatly depend on the person.

In most cases milking machines equipped with cans are cleaned manually and not always with a vacuuming system, which necessitates a subjective determination of the cleaning system in terms of duration, concentration, temperature and the quantity of solution. The influence of discipline and professional qualities of the individual milkers with this kind of milking machine was determined under experimental conditions at the Kostinbrod IZh [Animal Husbandry Institute]. If five individual tests from six milkers show a total number of microbes under 500,000 per milliliter which meets the requirements of the Bulgarian State Standard for First Quality, and only one test exceeds 1 million per milliliter, the microbe content of the six reaches 2.2 million per milliliter.

In the case of milking machines with centralized pipes the influence of the subjective factor is limited (the individual milkers wash the milking machine on the outside). The pipes are cleaned with a circulation system from the large circle of the pipe and the small circle of the milking machines. It is

done by the mechanic in charge of maintaining the milking equipment and is entirely dependent on his technical skill and feeling of responsibility. If the proper system for caring for this type of milking installation is observed, expressed mainly in terms of the functioning of the circulation system, the temperature of the solution and the concentration of the detergent and the disinfectant, the milk meets the required standard.

In the Kalipetrovo APK in Silistra Okrug, where the circular cleaning system is not in proper functional order, the milk's microbe content far exceeds stipulated norms. With the same type of milking machine at the Chernomore APK in the Tsarichino complex in Balchik the discipline of the mechanics and the professional skill of the individual milkers are so high that the milk's microbe content is the following: first team, 204,000 per milliliter; second team, 110,000 per milliliter; and third team, 118,000 per milliliter. The good results achieved in terms of the microbe content in this farm are the result of the clean cows and barns and the impeccable hygienic and technical maintenance of milking machines. Not least is the fact that the farm is steadily provided with sufficiently warm water. During days when the cold water is in short supply, however, the microbe content in the milk rises, for which the members of the collective cannot be blamed, for they also suffer damages due to objective reasons: the insufficient capacity of the water source in the complex.

The subjective factor is excluded in the rotary canwasher installation, for cleaning and disinfection here are programmed. In one of the barns (with such a system) in the Dulovo APK, Silistra Okrug, where the conditions for hygiene milking are observed, the microbe content is 170,000 per milliliter. A neighboring facility with a central milk pipe machine, with an inoperative system for rotary cleaning of milking machines the microbe content is far above the admissible level. If we mix the milk of the two barns the effect of the programmed cleaning of the rotary canwasher, which ensures a low microbe content in the milk is lost.

In milking machines with a centralized piping system it is of essential importance to eliminate as much of the residual water as possible after cleaning the pipes by blowing, for a large number of microorganisms develop here between milkings, particularly during the summer. In the cow farm in Ishirkovo, Silistra Okrug, where a rotary canwasher system is used as well, we determined that the residual water (7 liters) in the milk pipes, remaining between the noon and evening milking, contained 6.4 million microorganisms per milliliter, as a result of which the milk from the evening milking had 400,000 bacteria per milliliter. In order to prevent the milk from being severely infected with microorganisms, the residual water should be drained into the ditch rather than into the refrigerated tank where it will mix with the milk from the following milking.

A further intensification and rationalization of the process can be achieved above all by applying the udder-washing mechanism developed by Engineer Tonchev from Kalipetrovo village, Silistra Okrug. This system should be applied for the cleaning and disinfection of the udder before milking and, if possible, the intermediary disinfection of the machinery during milking

and the disinfection of the udder after milking are among the most important steps to limit primary infections and drastically reducing the microbe content in the milk.

The milkers, the farm management and, particularly, the management of the livestock farm, bear great responsibility for the proper cleaning and disinfection of milking machines and systems. Concern for equipment hygiene can be effective only if milkers and mechanics are highly skilled. No farm should use milkers who have not completed a machine milking course. Once a year the zootechnicians must mandatorily attend a 7-day refresher course to enrich their knowledge in the areas of technology, use and hygiene of milking machines.

The knowledge of the members of the worker collectives in the use and maintenance of milking equipment must be tested periodically in order to create the necessary conditions for observing milking hygiene and upgrading the quality of the milk.

#### Purchase of Beef Cattle

Sofia ZHIVOTNOVUDSTVO in Bulgarian No 6, 1984 pp 5-6

[Article by Senior Scientific Associate First Grade Dr Avram Pinkas, Kostimbrod IZh]

[Text] Our country is one of the few countries in Europe in which most of the cattle for slaughter is still purchased live. This obsolete form of relations between fattening and meat processing enterprises adversely affects the economic effectiveness of both. Scientific and technical progress in animal husbandry requires changes in purchasing fattened cattle, based on the actual product, in this case meat and fat, and the assessment of its quality. Such changes are entirely consistent with the resolutions of the National Party Conference on Quality Problems.

The advantages of this system were promptly assessed and years ago the management of the NAPS [National Agroindustrial Union] and, respectively, the Animal Husbandry Main Directorate and the Rodopa DSO [Economic Trust] converted, wherever this was possible, to purchases and payments based on slaughtered weight. This measure was welcomed by the producers and as early as 1981 about 25 percent of the livestock for slaughter was purchased on the basis of the actual products. However, the misunderstandings which developed in fulfilling the contracts signed between producers and meat processing enterprises led to the fact that as early as 1982 and 1983 the percentage of cattle for slaughter sold according to this system dropped to about 10 percent. Obviously, a real foundation for such a reform exists. However, it requires the preliminary resolution of a number of technical and organizational problems to facilitate its proper application.

Above all, we need a standard to regulate relations between producers of fattened livestock and meat combines. On the request of the NAPS a draft plan has been developed. It is currently being discussed and will be adopted. Its main principle is that payments be based on the weight of the

processed corpse with the fat around the kidneys, and to determine the level of fattening on the basis of the weight of the fat around the kidneys.

It is a well known fact that the correlation between the weight of the fat around the kidneys and the overall weight of the livestock is different for the various breeds, thus making the actual assessment difficult. Currently, however, we find no other objective method to determine the qualitative characteristic of the slaughtered animal. This weakness can be partially eliminated with the help of various standards for the different types of livestock. The point is to make such assessments objective and thus reduce to a minimum misunderstandings among interested parties.

According to the standard, the fattened cattle must be classified into three categories depending on further use. In our country, the breed development process remains quite active and the share of the Chernosharena breed (dairy cattle) has increased exceptionally at the expense of all other breeds, including breeds with well developed beef qualities. That is why henceforth cattle for fattening will consist mainly of dairy breeds and their hybrids. Furthermore, standards have been set for beef breeds and their hybrids. There will be two types of cattle, light and heavy, with different standards for each.

The third area includes the Gray Iskur, Rodopi, Jersey and others, in which the live weight of adult animals is relatively low, for which reason their grading standards are considerably lower.

One of the main problems which the standards resolve is that the animals can be slaughtered immediately after their transportation if the distance does not exceed 60 kilometers. The avoidance of preslaughter rest ensures higher quality beef. The stay of the livestock in the meat combines is restricted, thus preventing weight losses. A penalty is imposed for any additional time spent in the meat combine and the figure for the actual amount of meat produced is raised by 0.5 percent per 12 hours of extended stay.

The standard regulates relations among the interested parties in the case of damaged hides as well. In accordance with the stipulations of Bulgarian State Standard 486-78, the purchaser (the meat combine) will lose from 5-20 leva on the value of the individual hide. That is why according to the standard, if damages are established the producer will pay the customer from 0.5 to 1.8 percent of the overall cost of the animal.

The creation of a standard is the first step toward purchasing based on weight and quality of the carcass. In order for such results to be applied other technical measures should be taken affecting both interested parties. The producers must accurately organize their fattening process, which will ensure the rhythmical delivery of animals with a high live weight for slaughter.

In order to ensure the observance of the standard, the producers must assign to the meat combines specialists possessing the necessary knowledge and a high feeling of responsibility. In turn, the meat combines must install accurate



measuring equipment to determine the weight of the carcass. We are referring to the fact that some such devices were installed 20 to 25 years ago (in the Sofia, Varna and other meat combines) and cannot meet the actual requirements on which this purchasing system is based. Some minor changes in the technological slaughtering process must be made as well, dealing mainly with marking the carcasses after their skinning and weighing the carcass and the fat. They may be applied without any disturbance in the technological rhythm or delays in the production process.

#### Efficient Use of Fodder

Sofia ZHIVOTNOVUDSTVO in Bulgarian No 6, 1984 pp 33-34, 47

[Article by Candidate of Agricultural Sciences Stefka Grozeva, chief specialist at the Progres Accelerated Application Center of the DKNTP [State Committee for Science and Technical Progress], and Georgi Suev, general director at the Ministry of Finance Central Price Administration]

[Text] Lower fodder expenditures and higher output are of major importance in upgrading sheep breeding efficiency. During the past decade a lasting trend developed of a faster increase in the cost of producing mixed fodder compared to expenditures for directly produced fodder, such as silage, haylage, grazing, etc. This is directly related to the participation of imported components and the use of energy resources. This trend will be preserved in the years to come. Consequently, changes in the structure of the rations involving the use of less energy-consuming fodder could also increase animal husbandry efficiency.

The prices of hay, silage, grain feeds and grazing in sheep breeding increased between 10 and 25 percent, and for mixed fodder, by an average of 32 percent, from 1975 to 1981. The importance of the factors which have led to fodder price increases becomes clearer in periods of drastic natural and weather anomalies and changes in prices and delivery conditions for imported components. It is precisely this which necessitates the optimal participation of bulk feeds in sheep rations.

Experiments with weaned lambs and ewes aged between 18 months and 2½ years were conducted in 1975 and 1981 in order to determine the influence of fodder prices on sheep breeding costs and efficiency for the various feeding systems. The animals were divided into three groups based on the type of feeding: full rationed granulated mix (first group); granulated mix plus silage during the winter and fresh fodder in summer (second group); and traditional fodder—clover, silage, hay, concentrate and grazing (third group). Based on their age category, the fodder for all groups had the same food value in terms of fodder units and protein.

Depending on the structure of the rations in the individual feedings systems, 1981 fodder prices for the first and second groups (weaned lambs and ewes) increased by about 32 percent and for the third group by about 25 percent in 1981, compared to 1975. The cost of fodder for the third group must be assessed and compared to the weight increase and wool produced per animal and its

quality, and the higher outlays of labor and fodder waste. Table 1 shows changes in the cost of the weight increase based on the value of the fodder in the various feeding systems.

Table 1.

Category	Year	Price*	
		First Group	Second Group
Weaned lambs	1975	104.6	91.4
	1981	111.6	96.8
Ewes	1975	123.8	101.5
	1981	127.7	101.6

\*Third group taken as a base = 100

Table 2.

Indicator	Group*	
	I	II
Weaned lambs:		
Average daily increase	118.3	146.7
Wool production	112.1	109.6
Ewes:		
Average daily increase	81.3	103.7
Wool production	108.7	104.6

\*Third group taken as base = 100

Hence the conclusion that compared to 1975, the 1981 fodder prices, excluding other expenditures, increased in relative terms the cost of weight increases in all groups with the exception of second group weaned lambs. The significance of this factor should be considered also in comparisons with the new purchase prices of sheep breeding products as of 1 January 1981.

Fodder prices also influence the cost of fodder units and protein. Their amounts in the fodder for all three groups were virtually identical with a deviation of 23 percent. In 1975 the price per fodder unit for weaned lambs in the second group was 12.7 percent lower than for the first and by 24.4 percent lower than the third; the price for the third group was 24.4 percent lower. For ewes it was respectively 15.2 and 29.5 percent lower than in the first group. In 1981 the price per fodder unit for second group weaned lambs was 13 percent and in the third group 28.7 percent lower than in the first group; for ewes it was lower, respectively, by 25.3 and 31.2 percent.

Compared to the first group, the price per unit of protein in 1975 was 17.5 percent lower for second group weaned lambs and 25 percent for the third group. Corresponding figures for ewes were 11.6 and 31.1. In 1981 the price per unit of protein was 17.5 percent for second group weaned lambs and 25 percent for third group weaned lambs lower than for the first group; the respective figures

for ewes were 11.9 percent for the second and 34.9 percent for the third group, compared to the first. This means that in 1981 fodder prices showed a virtually identical deviation in the prices of fodder units and protein for the individual feeding systems compared to 1975.

Equally interesting are the results in terms of increased weight and wool production for the individual animal groups (Table 2). A higher increase was achieved for second group weaned lambs and ewes. In terms of wool production better results were achieved by the first group (weaned lambs and ewes).

Other trends directly related to expenditures and to higher production of meat, wool, milk and offspring within a shorter period of time become apparent for the various feeding systems.

In feeding with whole ration granulated fodder, weight increases per first-group animal averaged 28 percent more than in conventional feeding (third group) and 20 percent more compared to the second group (mixed feeding). The feeding systems affect the quality of the wool as well, which was higher for the first and second groups. Furthermore, the wool showed less mechanical and vegetal admixtures and higher yields--43.5 percent for the first and second groups and 40.6 percent for the third. This equals an additional amount of wool per sheep of 0.770 kilograms for the first group and 0.610 kilograms for the second, compared to the third group. The animals from the first and, partially, second group are able to reach a certain live weight in less time (by about 40 days) compared to the third group. Therefore, labor expenditures are reduced and material facilities are used more intensively.

Profit per animal based on the price of fodder and output in 1975 and 1981 is the most synthesized indicator of the efficiency of the various feeding systems. The new prices of fodder and animal husbandry output leads to increases in both production expenditures and income. We already provided data on changes in fodder prices. Compared to them, the growth rate of purchase prices for products in 1981 was higher by a factor of 2.5 on an average in 1981; prices increased as follows: wool, by 75 percent; milk 79 percent; mutton by 68 percent and lamb by 18 percent. Naturally, this affects income and, respectively, profits per animal in 1981. In the case of weaned lambs profits increased by 21.70 leva for the first group, 24.80 leva for the second and 19.90 leva for the third, compared to 1975; the respective figures for ewes were 39.40, 42.50 and 32. The reason for the higher profit is the significant increase (by more than 75 percent) of wool and milk purchase prices.

A comparison and assessment of all factors which affect the amount of expenditures for the production of sheep breeding items would show that under 1981 conditions and prices priority should be given to mixed feeding with whole-ration granulated mixes and fresh fodder regardless of the fact that in this case the share of granulation expenditures is higher than in barn and meadow feeding with traditional fodders. This meets the requirement of balanced feeding of the sheep raised with intensive methods and technologies.

## CZECHOSLOVAKIA

### FINAL 1983 ECONOMIC RESULTS COMPARED TO 1982 OUTCOME

Prague SVET HOSPODARSTVI in Czech 26 Jun 84 p 1, 2

[Article by Engineer Belo Bosak, CSc., federal finance minister: "Favorable Economic Results"]

[Text] During 1983 the economic and social tasks outlined by the 14th Congress of the CPCZ were performed for the third year. During his address to the Ninth Plenum of the CPCZ Central Committee, Comrade Gustav Husak characterized current development of the national economy thus: "During the first years of the Seventh 5-Year Plan we had to concentrate our efforts on overcoming certain extraordinary economic factors, on improving the internal and particularly the external economic balance, and we had to do so even at the cost of reducing the rate of growth. This year it has been possible to exceed plan goals and accelerate the rate of economic development while continuing to improve the economic balance."

In connection with evaluating economic and social development during 1983 the 10th Plenum of the CPCZ Central Committee stressed the great significance of the renewed dynamics of economic development which was accompanied by improved qualitative indexes and strengthened internal and external economic balance.

The gross national product, in comparative 1977 prices, rose by 2.7 percent over 1982, according to preliminary estimates. Industrial production rose by 3.0 percent (against 1.8 percent planned), construction by 2.7 percent (against a planned drop of 0.1 percent), and gross agricultural production was 4.0 percent higher, whereas the plan envisioned a decline of 0.6 percent. In accordance with plan goals, consumption of fuels and raw materials was reduced, while transport requirements also fell. All of this testifies to the successful fulfillment of the goals laid down by the Presidium of the CPCZ Central Committee and the government in August 1983.

Despite the improvement, 1983 did not see the required effects of scientific and technical development on improving the quality and utility of products, on improving technical and economic indexes, particularly in the means of production, or on decisive rationalization of production, as required by the resolutions of the Eighth Plenum of the CPCZ Central Committee. This must be achieved in the future.



Financial and budgetary policy in 1983 was directed toward the fulfillment of the goals of economic and social development, particularly in improving efficiency, achieving economic balance, and improving the living standards of the population.

The economic results achieved and the conditions under which economic development proceeded were reflected as well in the financial results for 1983.

Specifically, the goals of financial and budgetary policy with respect to increasing the efficiency of social production were fulfilled as follows in 1983:

--The total profit of economic organizations rose by 12.8 billion korunas or 12.8 percent; of the profit from the internal economy 76.7 percent was achieved by reducing expenditures and 23.3 percent by increasing output.

--The share of total expenditures in output (not including foreign trade) was 90.59 percent, which is 0.5 points less than the planned level, while the proportion attributable to material costs was 0.38 points below the plan.

--As a result of the foregoing factors, profits as a percent of costs reached 10.38 percent in 1983, which is 0.59 points above the planned amount and 0.91 points above the level of the previous year. Profits as a percentage of production funds equaled 5.36 percent (0.51 points above the plan), and profit as a percentage of adjusted internal product was 25.76 percent (or 1.17 points above the planned amount).

--Final results of the relations of state economic organizations to the state budget, not including the turnover tax or internal market differences, reached 77.3 billion korunas in 1983, which was 1.9 billion korunas greater than the budget called for.

--The turnover time for industrial and construction inventories accelerated by 2 days, whereas the plan called for 2.8 days.

--The total financial requirements for construction investment by state organizations reached 150.8 billion korunas in 1983, which was 1.1 billion korunas more than called for by the plan. The state budget met 39.7 billion korunas of this, or 26.3 percent.

--Of the outlays for the development of science and technology 0.7 billion korunas remained unused; the total was 17.0 billion korunas, of which the state budget financed 7.2 billion korunas or 5.1 percent more than in 1982.

One of the basic goals of the state budget for 1983, which follows from the principles of financial policy laid down by the Seventh 5-Year Plan, was to provide for equilibrium of resources and requirements throughout the entire budgetary system, thus improving the overall financial balance of the economy. Fulfillment of this goal was associated with the requirement

for further increasing the efficiency and quality of social production, applying the efficiency program adopted for the Seventh 5-Year Plan, and utilizing reserves in individual economic sectors.

Even though the realization of this goal was subject to a large number of internal and external influences, the goal of a balanced budget was achieved. The fact that the profit goals for the economic organizations were exceeded had a favorable effect on increasing the share of the economic sphere in the creation of resources throughout the economy and on the income of the state budget. Positive effects were also felt from the fulfillment of the efficiency program and the expansion of goals in this area which was adopted by the government resolution on the state budget for 1983. All of this made it possible to eliminate certain negative tendencies in financial development, with the result that the state budget ended with a surplus of income over expenditures equal to 0.09 billion korunas.

As in previous years, the favorable results of state budgetary management should not be overestimated. It should be kept in mind that, along with these positive factors, there were a number of unfavorable elements which resulted in undesirable deviations from the fulfillment of planned goals. Nevertheless, budget results for 1983 made a positive contribution to fulfillment of the goals established for the period of the Seventh 5-Year Plan.

Overall income of the state budgets and the budgets of the national committees totaled 324.13 billion korunas, which was 102.8 percent of the plan goal. The rise in income in comparison to the previous year (the index was 103.2) owed something to the good achievements of the economic organizations. Withdrawals by these organizations reached 102.5 percent and increased by 8.9 billion korunas over 1982. Less satisfactory was fulfillment of the plan for taxes on turnover and internal market differences, which reached only 98 percent. This reflects both fulfillment of the plan for deliveries to the market funds and changes in the structure of the deliveries of goods for the internal market, which were unfavorable from a tax standpoint.

Overall expenditures reached 323.89 billion korunas, i.e., 102.7 percent. Of the planned expenditures, allocations for investment by economic organizations were not fulfilled (96.3 percent). In comparison to 1982 there was a drop in overall investment expenditures from the state budget (not including allocations for investment by cooperative organizations) of 1.04 billion korunas (the index was 97.6). The higher rate of expenditure for the economy and the financial and technical services was affected principally by the goals financed by earmarked plan reserves on a nationwide scale.

In the spirit of improving planned management the integrating and coordinating function of the state budget of the Czechoslovak federation was introduced into the budgetary system. The income of the state budget of the Czechoslovak federation made up 61.9 percent of the overall income of the three state budgets, while its expenditure constituted 20.5 percent. The majority (67.0 percent) of the expenditures of the state budgets of the Czechoslovak federation took the form of allocations to the budgets of the individual

republics. These allocations were made in amounts assuring economic balance, in accord with the law on the state budget and the authorizations which result from it.

The goals in the area of living standards were based on the budget forecasts for 1981 through 1985, the financial policy established for the Seventh 5-Year Plan, and directives of the Czechoslovak Government concerning living standards as contained in the directives for developing the Seventh 5-Year Plan and for establishing the state operational plans and state budgets for the individual years of this 5-year plan:

--Non-investment expenditures from the state budget for social services for the population reached 147.8 billion korunas in 1983, which is an increase of 3.4 percent over 1982. It amounts to 9,586 korunas per capita of population, or 286 korunas more than in 1982.

--These expenditures in 1983 included 80.8 billion korunas for social insurance, i.e., 3.7 percent more than in 1982. The largest increase was in income insurance (3.9 percent). The number of paid incomes as of the end of 1983 totaled 3,922,000, which is 1.2 percent more than in 1982.

--This increase reflects the influence of the growing number of people with insured incomes and the increasing number of people beyond the productive age. The average old-age income paid in 1983 was 1,282 korunas.

--The increase in expenditures for health insurance, equal to 3.4 percent, resulted principally from the rise in sickness payments (6.6 percent) as a consequence of the high average percentage of persons unable to work.

--The volume of budgetary expenditures for social welfare reached 17.5 billion korunas in 1983, rising 1.8 percent over 1982. The small increase in these expenditures is above all due to the continuing drop in the birth rate, particularly in the Czech republic. Overall social welfare payments to families with children totaled 36.6 billion korunas, including financial and in-kind payments and various discounts.

--The increase of 2.6 percent in expenditures on education (the total of noninvestment expenditures was 24.6 billion korunas) reflects improvements in the material conditions of schooling and providing for new educational techniques, the effects of large cohorts of children in the basic schools, and the execution of government resolutions concerning sending children from affected areas to outdoor schools. The number of children eating in school dining halls increased by 7.7 percent, the number of classes in elementary schools and gymnasia rose by 1.4 percent, etc.

--In health care, where noninvestment expenditures rose by 4.2 percent, reaching 22.9 billion korunas, considerable attention was devoted to completing the material and technical foundations of the service; this underlies high-quality health care. New hospital complexes were brought into operation and a network of departments for examination and treatment was completed. Regional pediatric, gynecological, and stomatological care was expanded, health-care agencies devoted their attention to the problems

of protecting the living and working environment, and measures were taken to limit viral diseases. Expenditures for medicines and special health equipment increased sharply (by 12.9 percent), reaching 399 korunas per citizen. The increase in this component reflects not only improved quality but to a considerable extent the effects of the cost of imported raw materials. There were 993 more places available in day-care centers than in 1982.

--Expenditures for culture increased by 3.4 percent, with noninvestment expenditures reaching 4.7 billion korunas. They were concentrated on the operation and development of a broad network of cultural installations, contacts with foreign countries, artists' unions, the maintenance of cultural objects and monuments, and other programs of nationwide significance.

--Expenditures from the state budgets for housing construction and the housing economy totaled 23.8 billion korunas and the budget was exceeded by 0.3 billion korunas. According to preliminary figures a total of 95,701 housing units was completed (6,128 less than in 1982); of this total, 35,439 units (31,024 cooperative units) were earmarked for manpower recruitment and stabilization. Positive achievements were seen in complex construction, the goals being exceeded not only for housing units but also for social and technical equipment of residences. The goals of modernizing the housing supply have not been reached.

The improved economic development in 1983 as compared with the first years of the Seventh 5-Year Plan creates realistic conditions for achieving the overall goals of the 5-year plan, not only quantitatively but also, in accordance with the requirements of the 14th Congress of the CPCZ, qualitatively as well.

Despite the continuing difficulty of internal and particularly external conditions, the rate of development increased, there was a further drop in the hard-currency debt, and social consumption continued its rapid growth. The economic growth was based increasingly on intensification, particularly on savings in overall costs and expenditures on fuels, energy, and raw materials. This was the main factor in exceeding the goals for economic profits, even though intensification in production still has a long way to go, as was pointed out by the Eighth Plenum of the CPCZ Central Committee.

The financial agencies must take an aggressive approach to the fulfillment of demanding goals and must direct their efforts toward fulfilling the goals for 1984 as outlined in the 10th Plenum of the CPCZ Central Committee. In finance, goals must be achieved by increasing labor productivity, reducing overall costs, especially those for raw materials, reducing energy consumption in the national economy, achieving higher prices and better relationships between prices of exports and imports, etc. We must also begin to fulfill the directives concerning preparation of the plan for 1985, which should create the conditions for outlining the demanding goals of the plan and the budget for 1985 as the final year of the Seventh 5-Year Plan and a starting point for the Eighth 5-Year Plan.



## CZECHOSLOVAKIA

### ENERGY REQUIREMENT IN VIEW OF CHANGED ECONOMIC CONDITIONS

Prague JADERNA ENERGIE in Czech No 4, 1984 pp 121-124

[Report to the 12th Conference of Czechoslovak Power Engineers in Bratislava by Roman Cizek, State Planning Commission: "Changes in the Situation of Czechoslovak Economic Development and Their Effect on Power Engineering"]

[Text] This article defines the changed conditions for the development of power engineering and the consequent need to reduce the consumption of power, and the objectives of the development of Czechoslovak power engineering, whose achievement will be essentially determined by the construction of nuclear power engineering.

The work on a long-term project for the development of Czechoslovak power engineering has begun with full intensity. The first more comprehensive and interconnected concept will be submitted to our government in the middle of 1984; therefore, my presentation will deal with partial analyses and considerations, because the limited scope of an article does not permit me to identify the whole gamut of problems. Thus, this paper will be restricted to comments on the trends that may be expected in the coming years and decades in the development of our fuel and energy base.

Nevertheless, even today one can say with all certainty that the internal and in particular the external conditions determining the development of the Czechoslovak economy, which have become evident over the past years, cannot be repeated in the future. In principle even the extensive methods of the development of the forces of production which were predominant thus far cannot be repeated. Future development must be based on a different combination of production factors and founded to a much greater extent on the effect of their qualitative aspects and on activation of the human factor. The growth of national income must be completely based on the growth of efficiency of production assets, i.e., it will grow only as fast as the efficiency of social production increases. Not just any kind of economic dynamism, but only dynamism of effects corresponds with the period of intensive development.

For an objective assessment of the potential of the development in the period after 1985 it is imperative to evaluate, at least in its main aspects, the level achieved in production and consumption, the trends of the development in our country and abroad, and the basic correlations linked with such data.

All analyses completed thus far agree that:

1. A relatively high qualitative standard of production and consumption exists in the CSSR. Our country ranks among those with the absolutely highest production of lignite; we are almost producing the highest per capita amount of raw steel and comparatively numerous plastics; in our industry we are using relatively and absolutely great amounts of cotton, timber, etc., per capita. Nonetheless, it cannot be said that this is beneficial for our society and advantageous for our economy.
2. Our living standard has developed very rapidly in the past period. By its quantitative consumption the CSSR has outrun countries with comparable or even higher economic standards; however, the structure and the qualitative standards of consumption differ.
3. The growth of the Czechoslovak economy in the 1970's and early 1980's points out the continuous strong effect of extensive factors. The growth of our economy is ensured to a considerable degree by the growth of the mass of production assets with a decline of their effect. Our economy is operating with enormous requirements especially of:
  - a) energy, raw materials and all types of materials, including intensive consumption of agricultural and food raw materials and transportation;
  - b) disproportionately high extent of fixed assets required to achieve the existing level of production;
  - c) the number of work forces and thus, the amount of human labor required for the achievement of the current level of economy.

In these correlations one must discern above all the fact that the consumption in our production and its effects are not progressing in a desirable manner. For example, energy, metals and certain other raw materials have here a special place and a special role.

Let us take a look at the consumption of power in the creation of our national income. Measured in physical units, this was declining noticeably throughout the 1964-1980 period. While in 1970 we required 260 thousand t mp per Kcs 1 billion of national income (NI), in 1980 it was only 204 and in 1985 we anticipate a decline to 190. The input of crude oil in the economic process slowed down due to the escalating oil prices, which led to the decelerating rate of reduction of power consumption. On the other hand, in value expression, the rising prices of oil and subsequently also of natural gas as well as the rising prices and costs of other fuels increased the encumbrance of the creation of national income by procurement costs of fuels and energy, because the low level of their processing became evident:

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	<u>1975</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1982</u> <u>1975</u>
Consumption of power					
(in Kcs million per Kcs 1 billion of NI)	66.1	95.6	101.3	118.0	1.78%

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The Eighth Plenum of the CPCZ Central Committee analyzed in depth the common denominator of many current problems in development, namely, the shortcomings in R&D and in the application of its achievements in our production and consumption.

Between the 1970's and 1980's the crisis developing in capitalist countries turned worse, which was reflected in many ways in the development of socialist countries. Here the higher order of the rise in oil prices (as compared with 1973 and 1974) and of some other raw materials was of particular importance, as it had forced a substantial cut especially of their import. Although our economy came to grips with this imposition, its dynamism of the growth of national income was affected.

At present environmental problems are gaining in significance. We are consuming a great amount of lignite with high contents of ash and sulfur. We are approaching the maximum in the consumption of chemicals in our agriculture. Both these circumstances as well as other factors are affecting our environment, particularly the quality of our water and air.

In the past the share of imports to cover the requirements of fuels and energy in our national economy steadily increased. While in 1960 imports shared 10.9 percent in primary energy resources, in 1980 their share reached 38.8 percent, even though the rate of growth of fuel and energy imports had already been considerably slowed down.

Our economy could not tolerate the continuation of such a development after the skyrocketing increase in oil prices in world markets and, in that conjunction, also of prices of most other sources of fuel and power, although on the basis of the principle adopted for price-setting in economic relations among socialist countries this price trend began to affect our economy only much later.

Although a more vigorous course had begun to some extent already at an earlier date, in 1980, the first year of the Seventh 5-Year Plan, our national economy began to conserve energy, as may be confirmed by the following indicators: for the past 25 years, in 1955-1980, our domestic consumption of primary sources of fuels and energy increased on the average by 11.6 million t mp over a 5-year period. For the 1980-2000 period we want to implement measures to increase the

consumption of primary fuels and energy in our national economy at most by 12 million t mp over 20 years, which represents on the average only a one-quarter annual increase as compared with the preceding 25 years.

While fulfilling these tasks and planning conceptual decisions for an extended period, most attention is focused on restricting the consumption of petroleum products as the most expensive sources of energy. For the purposes of power engineering, the consumption of petroleum products in the form of heating oils peaked in 1979 with the consumption of 9.2 million tons of heating oils. Since that time measures were introduced to cut their consumption drastically. A decisive step in that direction was taken above all in 1982, when a balance of foreign payments had to be achieved by cutting imports of crude oil by 2 million tons over the preceding year. This reduction was reflected first of all in the consumption of heating oils, which declined in 1982 by 1.8 million tons as compared with 1979. Approximately one-half of that reduction was achieved in the consumption of fuels for the generation of power and heat. The most significant share in the other half is that of the consumption of heating oils in metallurgy, in the production of clinker and in drying processes, especially in agriculture. This cut was achieved first of all by substitution of other types of fuels and energy and in two-fuel bases particularly by more extensive use of natural gas and only in part by absolute savings.

Moreover, the amount of petroleum products used as motor fuels has been drastically cut by inviolable ceilings stipulated by directives for individual branches of the national economy and by price adjustments.

In summing up our experience from the development thus far and from the situation of the Czechoslovak economy, we come to the conclusion that exploitation of the reserves accumulated in our national economy offers potential opportunities for upgrading its efficiency and, in this conjunction, for accelerating the creation of national income. I shall briefly mention the nature of these reserves:

--the already built modern industrial base;

--the situation and integration in the international division of labor, predetermined by agreements;

--the broadly developed base of our livestock production and the great input in the material base of our crop production;

--the high standard of our people's education.

Thus, in the coming stage of the development of Czechoslovak national economy, we must recognize the necessity and the opportunities and conditions of overcoming the current situation and of increasing the dynamism of effects.

Our long-range pivotal strategic aim is to build a developed socialist society. The fundamental means for its fulfillment must include the achievement of dependable dynamism in the development of the forces of production, in better socialist relations in production and in further consolidation of our socialist way of life.



Therefore, this means to build a society whose immediate goal, and at the same time also the most important means for its achievement, is comprehensive social progress of our working people. The future development of the living standard of our population as the material foundation for the development of a socialist way of life should progress mainly along the line of the development of its qualitative aspects in view of the fact that in the main areas of our requirements (with the exception of housing) we are nearing, in terms of the quantitative volume, the limits of rational consumption.

In 1985-1995 the approaches to the achievement of this goal must proceed from the decisions of the 16th CPCZ Congress, which have long-term application and from which it follows that rapid transition of our national economy to an intensive method of development calls for gradual reconstruction of the structure of social production, mainly on the basis of acceleration and the highest possible application of R&D achievements to foster a dramatic growth of economic intensification, to enhance the efficiency and quality of all labor and to intensify the participation of the CSSR in the international division of labor, primarily with the CEMA states and, above all, with the USSR.

To achieve the goals in the development of our society, i.e., in particular, to achieve further progress in the development of our society as a whole in the period up to 1990 as well as in a longer time-frame, and in the creation of prerequisites for the adaptation of our economy, especially our industry, to the conditions of the 1990's, it will be desirable to achieve a national income growth of 3 to 3.5 percent gross annually in the Eighth 5-Year Plan and 3.5 to 4 percent annually in the Ninth 5-Year Plan. This may be accomplished mainly by drastic cuts in the consumption in the production.

One of the vital prerequisites is the reduction of specific consumption of power by about 2.5 to 3 percent annually, and of the consumption of ferrous metals by about 3 to 3.5 percent annually (in machine engineering by about 5 percent annually) in relation to NI.

The costs of the procurement of fuels and power from imports and from our domestic resources are already so burdensome on our economy that their previous rate of development can in no case continue. The demands for means of payment in foreign trade and the demands on investments in the development of our fuel and power engineering base would siphon off so much of our national income that there would not be enough funds for other vital needs of our national economy and for the creation of prerequisites for its more efficient and dynamic growth. Furthermore, one must realize that the development of our own fuel and power engineering base is restricted not only by our economic potential but also by the opportunities for technical and material provisions; the ecological limits to the exploitation of lignite in particular must also be stressed here.

In this respect our domestic consumption of primary resources of fuels and energy under such circumstances must not exceed 115 million t mp in the year 2000.

Therefore, the most fundamental principle of our long-range fuel and power engineering policies is to cut down to a minimum future demands for higher sources of fuel and energy and to focus our efforts concerning further development of the Czechoslovak economy on more drastic and rapid reduction of energy consumption.

In future 5-year plans the state goal-oriented program for rationalized consumption and exploitation of fuels and energy will continue to serve as the basic mechanism for more efficient utilization of fuels and energy. This program will be planned under the guidance of the State Commission for R&D and Investment Development, according to the stipulations for the planning of the Eighth 5-Year Plan and for long-range outlooks. From the beginning all levels of management must focus particular attention on the planning of this program. It must be presumed that efficient rationalization programs for the conservation of fuels and energy will be launched as a priority in the framework of investment funds which will be available to our national economy. By the same token, we must not forget that in comparison with the preceding stage the implementation of the rationalization program will be connected with higher requirements of investments, particularly because we must achieve higher savings and because we have already exhausted the more accessible untapped assets or are using them at present. The costs connected with the change in the structure of consumption in conjunction with the ongoing change in the structure of the sources of fuels and energy cannot be ignored. This problem must be resolved as an integral part of the program of rationalization. The success of actions which will be included in the rationalization program will depend most of all on their fulfillment in comprehensive planning and in supplier-consumer relations.

No further growth of steel production, but rather its decline, is envisaged for our most energy-intensive branch of industry -- metallurgy. At the same time, however, the use of petroleum products and natural gas must be eliminated from the blast furnace process as well as from steel production and substituted with other sources of energy.

By the same token, there are many methods of conservation of fuels and energy for technological consumption within the metallurgical cycle, such as above all expansion of energy-saving technological processes and the introduction of new methods, for instance, steel production in oxygen converters, continuous steel casting, refining of steel outside the furnace, enrichment of the furnace blast with oxygen, utilization of waste energy in technological processes during which at present it is lost, etc.

Machine engineering, which plays a major role in reducing the consumption of power in our national economy, is of special importance in this respect mainly because of the fact that

--as the producer of means of production the technological standards of its products determine the requirements of power in all other branches;

--as a major processor of metals its consumption of metals affects the consumption of fuels and energy in metallurgy.

The solution to both those tasks should result in substantial cuts in prices per kg, which should also be fostered by a gradual change in the structure of engineering production in the direction toward branches and products with higher prices per kg, i.e., with a greater share of skilled labor and refined materials.

The development of microelectronics, efficiency electronics, computer technology, measuring, control and automation technology and a whole number of modular branches corresponding to the standards and trends in states with advanced industry above all must play the key role in the efficiency of our engineering production, its technical standard and its consumption of materials and energy, and in the ability to hold its place in increasingly demanding foreign markets.

In our chemical industry, which is another of the highly power-intensive branches of our national economy, potential restrictions of certain most energy-intensive productions must be considered. In this respect replacement of obsolete technology for the production of ammonia and better utilization of secondary sources of power and, above all, the development of less power-intensive chemical products may bring significant contribution.

Moreover, testing of a specific range of additional types of products with high consumption of fuels and energy (concrete, glass products, etc.) must be reviewed.

In addition, two main directions must be followed in conserving of energy in production and when using construction materials:

1. Introduction of advanced technology in the production of construction materials (for example, switch to the dry method of clinker production and better recycling of secondary sources of energy in the production of construction materials, etc.);
2. Expansion of the production and use of fibers for thermal insulation.

Further actions are aimed at expanding the share of log buildings in agricultural, industrial and private construction, at restricting the use of asphalts, at introducing appropriate fillers for plastics, etc.

These are some of the most important examples of conservation of energy by changing the structure of the production or by changing the technology. Many other directions may be found in every branch of our national economy, including agriculture, and especially in the communal housing sector; this will be one of the main tasks in the planning of a long-range outlook for the sector of fuels and energy and in the planning of the state goal-oriented program for fuel and energy conservation.

Let us now turn our attention to problems in the development of individual sources of fuels and energy and to the consequences stemming from them for the area of their consumption.

The development of nuclear power engineering is the principal trend which is supposed to cover the increase of the sources of fuels and energy in future years. Due to a whole number of shortcomings, this development has been considerably delayed. On the basis of a completed analysis, it was concluded that before the year 2000 we shall be able to begin operation in nuclear power plants with capacity in the 10-11 GW range. According to current estimates, our nuclear power plants in Jaslovské Bohunice, Dukovany, Mochovce and Temelín and one or two additional GW in a yet undesignated location should be fully operable by the year 2000. It is envisaged that the heat generated in all those power plants will supply large areas in their vicinity. Furthermore, the potential use of nuclear heating plants in our heat supply system is also under study; however, it is obvious that its realization may not be considered before the end of this millenium.

The vital importance of nuclear power plants for the long-range balance of fuels and energy is evident from the following data:

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	<u>1980</u>	<u>1990</u>	<u>2000</u>
Share of nuclear power plants (in percent):			
in domestic consumption of primary resources	1.5	9.2	15.0
in generation of electricity	6.2	33.0	52.0

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The use of crude oil and its products calls for special attention. There can be no long-range considerations whatsoever about increasing the resources of crude oil above the current situation; by the same token, the use of petroleum products will increase in those areas where they either can be replaced not at all or only with difficulty and in a limited number, i.e., in petrochemical engineering and in the supply of motor fuels. An unambiguous conclusion follows from the development thus far: conditions must be created for conservation of petroleum products for the purposes of power engineering, and their use in stationary power engineering must be restricted to a bare minimum before the year 2000. At the same time, conservation of liquid fuels will call for the greatest possible switch in freight and passenger transportation to railroads, and in municipal transportation to subways, tramways, express trains and trolleybuses instead of autobuses.



On the other hand, a further, albeit not overly steep, increase in sources of natural gas may be projected for the future both in conjunction with higher payments in kind from the projected expansion of transit of Soviet natural gas by our transit system as well as due to Czechoslovakia's potential participation in the adoption of new sources of natural gas on USSR territory. Moreover, a certain rise in our domestic production of natural gas may be anticipated, while in long-range outlook the total increase of the sources of natural gas will not completely counterbalance the decline in the consumption of liquid fuels for the purposes of power engineering.

Therefore, the increase in the sources of natural gas must be designated mainly for the switch of lighting gas appliances due to its diminishing sources, for supplying vital technological needs, for direct deliveries to the public, and only then, to a certain limited extent, for substitution for liquid fuels in power consumption. The capital city of the CSSR, Prague, the capital city of the SSR, Bratislava, and the [coal] basin districts in the North Bohemia Kraj will be given preference in deliveries of natural gas for the generation of heat.

Lignite will remain for many years to come an important source of power and heat generation. Its production capacity peaked in 1983. The concluded analyses indicate that its production will decline about by 5 percent before 1990 and by an additional 8-10 percent before 1995.

In terms of lignite supplies, the first years of the Eighth 5-Year Plan require special attention. The viability of the pits in operation in the Sokolov Basin has been cut because for several recent years this basin was making up for a shortfalls in production in the Most Basin, which had fallen below the projection of long-range plans. For that reason it is becoming obvious that the capacities of lignite will be insufficient after 1985. The situation is all the more serious in that it is reflected mainly in reduced sources of graded coal and of lignite dust of better quality. This unfavorable structural change has a long-term character. Its solution requires that as much of the remaining supplies of graded coal as possible be released from the branches of production and delivered to the population and that systematic measures be introduced to expand efficient the combustion of low-caloric coal and to reduce to a minimum pollutants in every area of our national economy.

The production of bituminous coal will decline gradually by about 10 percent over the next 10 years because of its diminishing [deposits] in the Ostrava-Karvina Basin. The extent of the production in that basin will be determined by the requirements of coal for coking with regard to the indispensable production of coke, mainly for our domestic consumption.

While maintaining the current level or with a slight increase in the production of coke, its amount must ensure first of all complete replacement of heating oils and natural gas in metallurgy with coke, and a higher share of coke in exports to the detriment of cokeable coal.



A specific problem concerns the requirement of heat in our national economy. With the progress of the construction of nuclear power plants, low-caloric lignite will be released for those purposes from electric power generation in conventional steam power plants. Efficient utilization of such coal demands that various consumers pool their funds and invest in the construction of major facilities utilizing combined heat and power generation. In this respect conversion of conventional steam power plants to heat generation and utilization of heat from nuclear power plants will also help considerably. Furthermore, in conjunction with the development of nuclear power engineering, it will be useful to study the potential areas where electric power may be used for heating, mainly in communal housing.

In conclusion, I should briefly summarize the principles of our power engineering policies for the next 10 years, which may be expressed by the following three principles:

1. Rationalization and structural changes to reduce substantially power consumption in the Czechoslovak national economy, especially to eliminate expeditiously and very progressively the consumption of liquid fuels in stationary power engineering;
2. The nuclear power engineering system is the basic factor in the development of our fuel and energy balance; conditions must be made to prevent the construction of new nuclear sources from lagging behind;
3. The production of lignite and bituminous coal will be systematically (albeit slowly) reduced in view of the rational exploitation of our remaining natural resources as well as in view of technical, economic and ecological considerations.

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ECOLOGICAL THREAT TO MOUNTAIN RANGE

Prague TRIBUNA in Czech 11 Jul 84 pp 4-5

[Article by Jaroslav Tvrzník: "To Save the Jizerski Mountains"]

[Text] The Jizerski mountain range is a far-flung land mass in which many significant treasures of natural history and scenery are concentrated. Morphologically it is singular and varied, with deep woods, peat bogs, mountain brooks and enclaves bordered with strips of meadows and fields, with lush, verdant countryside strewn with buildings of folk architecture, which is an important contribution to its scenic character.

In the past these mountains had not been known so well as, for example, the Krkonose range, but gradually they have become an increasingly popular tourist paradise. However, many automobiles began driving up in the mountains and by and by the growing tourist invasion caused damage. For that reason, in 1967 the Jizerske Mountains were declared a national preserve.

Foresters' Anxieties

Let us now take a look at the whole situation from a different angle. Because of the pollution from the huge power plants nearby, the forest economy in the Jizerski Mountains has faced unusually difficult problems in recent years. Although the findings of surveys of pollutants concentrated in this area are well below the level of those in the Krusne Hory basin, the losses of forest growth have been very extensive and the destruction is progressing here at a faster pace than in the Krusne Hory.

An explanation for this unusually ominous development may be sought in the effect of other factors of pollution (especially hydrogen fluoride) and in the combined action of ecological conditions. The climate in the Jizerske Mountains is particularly harsh and the soil-producing rock formations there are just as poor as in the Krusne Hory, if not poorer. Those unfortunate circumstances are reflected in the conspicuously deteriorating health of forest growth weakened by the pollution.

Moreover, specific problems are linked with the vital importance of the water-economy function of forests in this territory, which is a protected zone of a natural water reservoir.

Our forest managers must now deal with all those problems. They must liquidate the insect-infested timber and carry on their regular cutting and afforestation programs. They cannot do this alone. For that reason, this year in the second half of April a consultation was held in Liberec in which the minister of forest and water economy, Frantisek Kalina, participated and which dealt with the tasks of both forest organizations for the current as well as for the Eighth 5-Year Plan.

We wanted to learn more about the situation and therefore, we spoke with the director of Forest Administration in Frydlant v Cechach, Eng Josef Beranek, with the director of the Forest Administration in Liberec, Frantisek Benes, and with his deputy, Eng Vladislav Sroubek.

#### Water and Vermin

Our forest managers regard the solution of interests of water economy and environmental protection as the most fundamental issue.

The decision of our district party and state agencies (for example, the presidium of the CPCZ District Committee in Liberec dealt again with the problem of the Jizerski Mountains on 23 May 1984) and the set of measures approved by the council of the North Bohemia Regional National Committee stress that the interests of water economy in the Jizerski Mountains must be given priority in cutting, planting and other plans. Forest organizations must protect the sources of water, must not impair their function and, in cooperation with water economists and all those who participate in the building of new facilities, they must safeguard the quality of water supply for the population in the vicinity far and wide.

Nevertheless, the protection of water in mountain brooks, creeks, streams and springs depends on many other factors--construction, industrial enterprises and organizations, which must buffer the negative impact of the processes of civilization on our water supply in the vast forests, bogs and dams.

Let us return to the greatest current problem--the infestation of the woods. It starts with pollutants which have a really pernicious effect because they weaken the organisms, providing opportunity for insect-caused destruction. The following fact is an example of this; in a normal environment spruce needles last on the average for 7 years and are shed in the 8th year. And here? Spruce needles last 2 years.

In recent years, specifically, since 1979, the larch moth has invaded the Jizerski Mountains; in 1980 it was essentially wiped out by massive air spraying and is now disappearing. Last year airplanes sprayed again 300 hectares of woods in the Kristianov area against the larch moth. Another pest, the pine borer, last year infested 800 hectares around Cerna Studnice and also required a relatively heavy air spraying with a more effective agent, Evisekt. In general, that improved the results of the operation. Nevertheless, there still is danger that the borer may spread destruction and endanger woods

in other locations in the Jizerske Mountains as well. Therefore, air spraying will continue (roughly over 2,000 hectares of forest in the Jablonec area and over 1,200 hectares in Cerna Studnice).

A proliferation of other vermin, such as the weevil and geometer moth, was noted; the gypsy moth, which has been damaging forests in the neighboring areas of Poland for several years, also poses some threat.

#### Areas Infested by Bark Beetle

The worst and most dangerous pest, however, is the bark beetle (*Ips typographus*) which multiplied excessively in 1982 and 1983 in the debilitated spruce woods often already infested by moths and weevils. Both forest administrations as well as forest administrations in the neighboring East Bohemia Kraj noted its greatest proliferation last year, particularly during July and August. The weather provided favorable conditions for it, with considerably lower precipitation and higher average temperatures than the long-range average, which caused the drying of the forest growth. Every drying spruce is a potential attraction for the bark beetle.

The situation of the forests at present makes the fight against that pest more difficult. When timber damaged by the bark beetle is cut and forests are thinned, they are open to wind and heat and the way is cleared for the even faster circulation of the pollutants. Increased heat offers favorable conditions for the proliferation of insect pests; even some insect species that do not harm a healthy environment become destructive.

This year the bark beetle has endangered a vast area in the Jizerske Mountains. For the Forest Administration in Frydlant, this means that roughly 12,000 hectares and 85,000 cubic meters of timber, i.e., 90 percent of its production task, must be processed. The figures for the Forest Administration in Nisa-Liberec are 15,000 hectares and 90,000 cubic meters of timber, i.e., 62 percent of its production tasks. Most affected are the forest areas in Smedava, Jizerka, Oldrichov v Hajich, Bedrichov, Cerna Hora, Holubnik, Sous, and Cerna Studnice.

Another damaged forest area is the Jested range, specifically the Machnin forest district.

The main, and in terms of time the next goal is to eliminate the damage caused by the bark beetle (even at the price of increasing regular production as well, so as to utilize all wood mass). Naturally, this is an exceedingly laborious task that cannot be done with airplanes, because the pest is hidden under the bark, and therefore the trees must be cut and their bark stripped or decontaminated with chemicals. Moreover, trees in water economy zone can only be stripped.

This increases more than 100 percent the requirement of work forces and escalates the costs. The forest administration has made all its employees available for chemical extermination operations, so hardly anyone is left to do the tasks of

cultivation--to haul away slashings, to till the soil, to thin the growth, to protect the cultures, and to work in nurseries.

#### Everyone's Help Is Needed

One thing is certain: our foresters do not have an easy life. For example, they intensified the recruitment of workers but its results have been less than impressive. Therefore, both administrations--the one in Liberec and the one in Frydlant v Cechach--appealed for assistance to our party and state agencies and to the district trade-union councils in the okreses of Liberec and Jablonec nad Nisou. That was some time ago, but their call is becoming increasingly urgent. Both district trade-union councils first issued an appeal to workers and the response was good. This is the third year that the council of the District National Committee in Liberec has organized a very successful competition, "Help to the Jizerske Mountains," in which schools, organizations of the National Front and industrial enterprises participate. The Municipal National Committee in Jablonec has organized, also for the third year, a similar competition of citizens' committees.

Our foresters are grateful for any help they can get; for instance, 50-60 members of the People's Militia are spending their weekends and holidays helping each [forest] administration chemically decontaminate trees infested with the bark beetle. The work of those 100-120 persons has already left its mark. Furthermore, members of the National Security Corps, the Correctional Training Corps, and, on Sundays, of the Army are rendering efficient aid. Among others who also deserve credit are the employees of the Liberec Automobile Works in Ostasov, who came with an automobile to help out in the woods and who were the first this year to honor their pledge, which set an example in this work.

Naturally, both forest administration--the one in Frydlant v Cechach, which oversees 19,000 hectares of forests and five forest managements, and the one in Liberec, which controls 36,000 hectares of forests and nine forest managements --are getting help in the eradication of the bark beetle primarily from the foresters. Thus, students of the technical school of forestry in Trutnov worked in Bedrichov and students from the vocational school of forestry in Hejnice worked in the Frydlant area. In addition, 10 workers from the LZ in Klasterec nad Ohri are working for the Liberec administration. Workers from the LZ in Ceska Lipa, Zatec, Litomerice and Rumburk are active in the Frydlant area. Such cooperation in the North Bohemia Kraj, i.e., within one enterprise, is matter of fact (after all, other locations may become affected in the same way), and thus one returns the favor.

As we said, it is obvious that there is a need for cultivation. Here we may mention schools and factories in Liberec (Textilana, Elitex, Skloexport and others) which have done a great job, from hauling away slashes to the planting of seedlings. This year schools for apprentices are also helping in the Jizerske Mountains. Neither are the employees of both district national committees standing idly on the sidelines.



One could go on discussing the problems of our forests all over the Jizerske range. We have not exhausted all of them by far. Let us add, however, at least that the fate of our mountains is not indifferent to most people, which is only right. After all, the mountains belong to all of us and must be preserved for future generations as well.

9004

CS0: 2400/381

GREATER MACHINERY SHARE IN CSSR EXPORTS REPORTED

Prague SVET HOSPODARSTVI in Czech 5 Jul 84 pp 1, 3

[Article by sk: "Greater Machinery Share in Exports"]

[Text] The intensifying process of economic integration, especially in one of its basic forms, which is multilateral specialization and cooperation in production, has an active role in our exceeding the planned goals in the exchange of goods with socialist countries in 1983. In comparison with 1982, in 1983 Czechoslovak exports to socialist countries increased by more than 10 percent, and the export of machinery and equipment was a decisive part of that growth. This is a result in part of the objective structure of overall Czechoslovak exports to that market, where machinery and equipment make up more than 60 percent of the exports, and in part of results achieved last year in the field in meeting commitments taken on by Czechoslovak organs and organizations in multilateral specialization and cooperation in the production of machinery and equipment.

In 1983 we met Czechoslovak export commitments contained in 72 multilateral agreements on specialization and cooperation in the production of machinery and equipment. The contracting parties, who are mainly foreign trade organizations and economic production units from departments of the Federal Ministry of Metallurgy and Heavy Machine Building, the Federal Ministry of General Machine Building, and the Federal Ministry of the Electronics Industry, devoted painstaking care and attention to ensuring that the agreements were carried out. The Czechoslovak export obligations were met overall and the value of exports of multilateral specialized machinery, equipment, components and parts exceeded 1.5 billion rubles. In comparison with 1982, this value of Czechoslovak exports increased in current prices by more than 344 billion rubles, and the increase between years was 28 points.

Of the overall total of 72 multilateral contracts, the following is a breakdown on their preparation and approval:

--the Standing CEMA Commission for Cooperation in Machine Building (including contracts in the textile industry), 50 contracts;

--the Standing CEMA Commission for Radiotechnical and Electronic Industry, 10 contracts;

--the Intergovernmental Commission for Cooperation in the Field of Computer Equipment, 1 contract;

--the international economic organization OSPVL [Organization for Cooperation in the Ball-Bearing Industry], 1 contract;

--the remaining 10 contracts were made by all other CEMA organs and CEMA organizations and international economic organizations of the CEMA member states.

An overview of the Czechoslovak export commitments accepted and their accomplishments is given by the following table (figures in thousands of rubles fco):

	<u>Commitments according to contracts</u>	<u>Actual deliveries</u>	<u>Share of CEMA member states (percent)</u>
Total CEMA for 1983	1,578,893	1,573,012	100
Broken down by country:			
Bulgaria	68,518	62,476	4
Cuba	11,806	15,880	1
Hungary	68,224	64,115	4.1
GDR	275,504	283,074	18
Poland	124,991	110,647	7
Romania	42,485	49,007	3.1
USSR	987,365	987,813	62.8

In comparison with the actual deliveries of the preceding period and the territorial distribution of Czechoslovak multilateral specialized exports for 1983, several facts are apparent:

--the GDR share increased by 4.3 percent, with a growth in value in current prices of about 114 billion rubles;

--Bulgaria's share dropped by 1.1 percent, with a slight increase in value of 108,000 rubles, and the USSR's share dropped by 3.3 percent, with a growth in value between years of more than 175 million rubles in current prices;

--the share of the remaining countries remained at about the same level, even though Cuba, Hungary, Poland and Romania all increased the value of exports from us in the range of 5 to 27 million rubles.

An analysis of the make-up of the goods shows that the most important contracts, under whose provisions 75 percent of the exports are performed, are as follows:

--from the Federal Ministry of General Machine Building: machinery and equipment for the textile industry, Tatra trucks in the basic model and individual modifications, machinery and equipment for the construction industry, agricultural machinery and tractors, seagoing ships and riverboats, machinery and equipment for the knitting industry, machine tools, machinery and equipment for working plastics, ball bearings, equipment for the printing industry, automotive assemblies, components and parts;

--from the Federal Ministry of the Electronics Industry: computer equipment.

The value of the above 15 contracts is 1.192 billion rubles, which breaks down as follows: the Federal Ministry of General Machine Building, 870 million rubles; the Federal Ministry of Metallurgy and Heavy Machine Building, 192 million rubles; and the Federal Ministry of the Electronics Industry, 130 million rubles.

The dominant customer position continues to be held by the Soviet Union, to whom we delivered mainly trucks, riverboats and equipment, agricultural machinery and tractors, equipment for processing plastics, machinery and equipment for the construction industry, machinery and equipment for the foodstuffs industry, machinery and equipment for the textile and knitting industry, machinery for the printing industry, equipment for communal laundries and dry cleaning, automotive assemblies and parts, equipment for ferrous and nonferrous metallurgy, computer equipment, ball bearings, equipment for nuclear power plants, and a number of other items.

There was a considerable growth in deliveries to the GDR from 1982 to 1983, which amounted to 67 percent. The inventory of goods delivered as specialized products includes agricultural machinery and tractors, machinery and equipment for the construction industry, hydraulic equipment, machinery and equipment for the textile and knitting industry, freight cars, machine tools, computer equipment, ball bearings, semiconductor and integrated circuit components, and other items.

In comparison with 1982, the export of specialized machinery to Hungary grew by 9 million rubles. Exports were mainly agricultural machinery and tractors, machinery and equipment for the construction industry, machinery and equipment for the textile and knitting industry, equipment for the printing industry, instruments for organizational technology, ball bearings and other products. In 1983 the decline in export of specialized machinery and equipment to Poland stopped. In comparison with the previous year, Czechoslovak exports increased by more than 27 million rubles, or by 32 percent. The main export items include trucks, agricultural machinery, machinery and equipment for the construction industry, machinery and equipment for the textile and knitting industry, motor-driven locomotives, medical technology products, machine tools, semiconductor and integrated circuit components, teletypewriters, ball bearings, and other items.

The growth in multilateral exports to Cuba in the period from 1982 to 1983 was 50 percent and amounted to more than 5 million rubles. The main items were agricultural machinery and tractors, automotive assemblies, components, and parts, street-sweeper trucks and computers.

In meeting the export commitments in 1983, there were also some deviations from the plan for trucks, agricultural machinery and tractors, hydraulic equipment, motor-driven locomotives, machinery for producing chemical fibers and threads, insulated automotive transport, and some others. The reasons for these changes or deviations from the commitments contained in the multilateral specialized contracts are:

--adjustments in the export volumes in the annual protocols to the long-term trade agreements;

--changes in the orders of foreign customers;

--insufficient production capacity on the part of the Czechoslovak contracting party;

--time changes in the delivery of capital investment equipment;

--delays in completing the price negotiations (for new or innovative products).

In 1983, the share of multilateral specialized machinery and equipment in the overall export of machinery and equipment to the CEMA member states rose substantially. While in the years of the Sixth 5-Year Plan this share fluctuated between 17 and 20 percent and increased in the years 1981-1982 to 22 percent and then to 24 percent, in 1983 it reached the 30-percent mark and amounted to 30.45 percent. This bears witness to the fact that Czechoslovak machine building has made a further contribution to the joint development of the international socialist division of labor.

6285

CSO: 2400/385



## INCENTIVES FOR WORKERS IN AGRICULTURE

Prague ZEMEDELSKE NOVINY in Czech 11 Jul 84 p 1

[Article by Eng Stanislav Ptacnik: "So They Won't Leave"]

[Text] Last Thursday in the supplement ZEMEDELSKA EDONOMIKA we printed information about two important measures in the area of compensation and the stabilization of the agricultural work force which were recently discussed and approved by the CSR Government. In essence, these measures provide expanded capabilities for using the resources of the work force stabilization fund.

The first measure makes it possible to pay a stabilization supplement of up to 10 percent of the annual earnings of workers who live and work for an entire year in agricultural operations in remote areas, where there is a lack of a public infrastructure such as food stores, preschool and school systems, year-round transportation connections and the like.

That this is a measure of some scope is indicated by the fact that the list of such remote locations currently includes 1,840 workers. In the CSR an annual amount of roughly Kcs 50 million is being projected for this purpose, to be drawn from the work force stabilization fund for agriculture. At the same time, it is an essential measure because it must be admitted openly that the work force situation at a number of agricultural enterprises is far from rosy. In the remote parts of some okreses there continue to be shortcomings in the supply system, even for basic foodstuffs, which the network is not resolving very flexibly. The establishment of central has, to be sure, somewhat alleviated the problem, but there are still places and areas where the inhabitants must still travel fairly far for their basic needs.

Nevertheless, there are livestock raising facilities in these areas, and they are surrounded by fields, pastures and meadows. Their output also represents an integral part of the total output of the cooperative or state farm to which they belong. Even so, many a senior manager contends that it is very difficult to recruit a stable couple to work in such a location, and that when they are successful in doing so it is a real coup.

The labor force situation in unified agricultural cooperatives [JZD], and especially state farms in certain okreses of the North Bohemia Kraj, is still

more complicated. The percentage turnover here is increased even more by the number of attractive jobs in preferred industrial sectors and enterprises. People without the requisite feel for agriculture are prone to leave for one of these positions. For this reason, advantages similar to those granted for remote areas are also offered for the North Bohemian okreses Usti nad Labem, Chomutov, Ceska Lipa, Teplice, Most, and the West Bohemian okres Sokolov. Agricultural enterprises in these okreses, as of this year, may grant a stabilization supplement of up to 10 percent of the total annual earnings to their blue-collar employees and technicians of operational units.

Senior managers of agricultural organizations which can provide these stabilizational supplements, now have in their hands considerable authority. It is up to them whether this new economic mechanism is used sensitively and sensibly. They may differentiate the amount of the stabilizational supplement according to working conditions, employee attitude and the needs for specific skills. Clearly, these newly approved supplements cannot resolve all of the problems in a given area. They should, however, fit in well within the overall complex of measures included in the social program of an agricultural enterprise so that people will recognize that the cooperative or state farm respects their work, and therefore choose not to leave the tractors, workshops and the livestock that has been entrusted to them.

9276

CSO: 2400/374

## INFORMATION SCIENCE AND CZECH AGRICULTURE

Prague ZEMEDELSKE NOVINY in Czech 30 Jun 84 p 1

[Editorial: "The Usefulness of Scientific Information"]

[Text] Currently more and more is being made of the information explosion that has seized the entire world, but especially the world of science and technology. Every minute throughout the world such a huge amount of scientific and technical information is created, processed, transmitted and utilized that it is no longer within the power of a single individual to comprehend it all. It is true that thoughts, ideas, discoveries and information have become a material force, if they are utilized. It is therefore necessary to develop the technical and organizational conditions so that information will be processed appropriately, with the objective of having it available when there is an interest in it.

With this in mind, how is one to evaluate the level of information science in our agriculture and food sector? It must be admitted that the people who two decades ago stood by the cradle of the Institute of Scientific and Technical Information for Agriculture were very perceptive, because an institution has gradually developed here which now has all of the preconditions to fulfill the current and future needs of the entire branch, from research institutes to agricultural enterprises. Evidence of the international recognition accorded its work is the fact that the institute was chosen as the coordinational center of agricultural information for CEMA.

Tradition has its advantages, especially in the sense that specialists have been trained here who are capable of keeping pace, creatively, with world trends in the technology of acquiring and processing information. On the other hand, tradition sometimes hinders in the sense that it tempts one to stay on beaten paths. The dynamic of the scientific and technical revolution changes rapidly, however, or, perhaps more accurately, the number of people hungry for timely information is expanding. The word "timely" should be underlined because it is true in this sector as well that "he who gives quickly, gives twice."

For many years the center of attention at the Institute of Scientific and Technical Information for Agriculture was the gathering, processing and dissemination primarily of foreign findings and information. In this regard, the work of the institute is at a high international level. It draws upon

professional journals from throughout the world, company literature, as well as being directly linked to a computerized data base such as the one at the disposal of the FAO and other international organizations. Today our Institute of Scientific and Technical Information for Agriculture is capable on short notice of providing, at an acceptable price, a summary of the newest findings worldwide for anyone who is interested.

In past years the greatest use of this work has been made by researchers, college employees and students. The senior officials of the institute do not want to limit themselves to this, however, and are intensifying their cooperation with management organs at all levels, above all the central ones. The hunger, however, for scientific and technical information also grows year by year in agricultural enterprises, where they have set up efficiency divisions or research groups which cannot get by without sources of information. For this reason, the institute has announced plans to set up information centers at agricultural enterprises. Experiences with such centers at the Cheb State Farms Sectoral enterprise and in certain other agricultural enterprises indicates that this is a good idea. For the time being the management of the institute is trying to set up at least one information center in each kraj so that it will be possible to manage the initial difficulties and from there expand the network of centers to additional agricultural enterprises. It is an intelligent and efficient approach. Biting off too big a chunk at one time could only harm what is basically a good idea.

The setting up of information centers in agricultural enterprises will also be supported by the CSR Union of Cooperative Farmers, as provided for in the recently signed agreement on cooperation between the Institute of Scientific and Technical Information on Agriculture and this mass organization of cooperative farmers.

It is possible that there are those who think that the setting up of information centers is merely an extension of the administrative activities of the united agricultural cooperatives, state farms, joint agricultural enterprises, state tractor stations and other agricultural and food industry enterprises. Current practice, however, indicates that our agriculture stands to benefit from the rapid and timely implementation of suggestions, recommendations, thoughts, patents, discoveries, and improvement suggestions. It is a matter of seeing to it that well-processed information makes it on time to those places where there is a use for it. This is true not only in research and, in enterprise services, but directly in the enterprises themselves. It is now necessary to channel information directly to this sector without intermediaries.

The institute has set as an objective the processing, for the needs of our agriculture, not only information from abroad, but our own findings as well, proven new techniques and improvement suggestions so that they can be transmitted to others as much as possible. This is an extensive, difficult task but a rewarding one because it always happens that one discovers what has already been discovered, and that even immediate neighbors are often not aware of the positive experiences of the other.

It follows from the above that employees of the Institute for Scientific and Technical Information in Agriculture are waiting for new tasks that will make greater demands on them in the sense that much creative effort will be necessary in searching for and finding the most effective approaches in an area that has much unexplored ground.

9276

CSO: 2400/374



## WEED CONTROL IN AGRICULTURE DISCUSSED

Bratislava PRAVDA in Slovak 10 Jul 84 p 3

[Article by Jozef Sedlak: "Penetration Into the World of Weeds"]

[Text] Weeds, as communities of plants, constitute a counterpoint to the world of cultural plants -- an antipode which the agronomists would prefer to get rid of because it is one of the biggest natural competitors of cultivated plants. They share with them or rather steal from them living space -- the soil, nutrients, light -- and convey infection. Uninvited by anybody (at least at the first glance), weeds invade all regions where man transforms nature in one way or another. If somebody utters the word "weeds," automatically the idea of something which grows contrary to man's will comes to one's mind. We take for granted today research on bacteria, microbes, various animal pests. However, we are beginning only now increasingly to appreciate the work of scientists who have found their life mission in the study of and research on flora that adversely affects the aesthetic appearance of the region, deprives us of the crops and makes breathing difficult not only for the cultivated plants, but literally also for man. Do we have a clear conscience now after we have described the weeds in these black colors? Is the term "weeds" correct in the first place?

#### Laws Governing Vegetation Interlinks

By their work "Theoretical Methods of Evaluation of Synantropic Plant Communities and Populations Including Weeds," the botanists Academician Slavomil Hejny, RNDr, Zdenek Kropac, CSc, and Eng Karel Kopecky, DrSc from the CSAV [Czechoslovak Academy of Sciences] Botanic Institute at Pruhonice, laureates of the Klement Gottwald State Prize, have shed light on the realm of this little-known vegetation which expands the limits of human knowledge. Due to their contribution we no longer see this particular vegetation in two basic black and white colors only. Their findings describe the entire, immensely interesting, plant community (let the botanists excuse us for this simplified expression) in the dynamics of internal development. The greatness of their contribution lies precisely in the discovery of motive forces of this community, its dominant features in relation to the plants which man has been scrupulously cultivating ever since he became a farmer.

What does synantropic vegetation actually mean? How does this Greek adjective define the noun with more precision? It essentially includes all types of

plants growing in the places significantly or only recently marked by human activity. We intentionally cultivate only a very small number of them as field or garden plants. Man for the most part unknowingly carries along the remaining plants and weeds. These are the plants that accompany him spontaneously, setting their roots simultaneously with human activity. This gives rise to ruderal vegetation -- a set of types which grows in unpaved areas of cities, along the edges of field roads, around the dung-hills in the fields, reloading railroad stations, river harbors and factories processing imported raw materials, and fights for its survival on the oversalted soft shoulders of highways with heavy traffic. Weeds and ruderals have the admirable ability to multiply. This may be so because man tries to exterminate them mercilessly and often at any price.

Nevertheless, they constitute a permanent part of vegetation and -- metaphorically speaking -- that part which contributes to its balance. If they multiply excessively, if such types previously unknown in our country appear somewhere, it is actually not their fault, but the consequence of our activity which destroyed the customary linkages in nature. Do we pay for ignorance or the price of progress? Why do you think there has recently been an increase in allergic bronchial diseases? The dirt brought to the new housing project completely changes or gives rise not only to a new soil environment, but also to a new community of ruderals. Pollen compounds of a new composition get into the air. While hay fever used to occur from the beginning of summer to fall some time ago, its incidence has advanced by a few weeks now.

Science, naturally, has tried to discover the laws governing these changes, the development of this mysterious world of vegetation. The so-called Zurich-Montpellier School studied these problems in the 1930's. Their concepts, however, suffered from static approaches. It separated, for example, the weed communities of grain crops from those of root crops, although they are interconnected in the sowing procedures. Moreover, the farmers armed themselves against weeds with an immensely varied scale of protective chemicals. Yet, the conditions have been changing and the weeds along with them. It is precisely this changeability on which our scientists focused their attention. Over 30 technical books published in our country and abroad have offered explanation of many phenomena which practice has lacked so far. Let us briefly mention at least some of them: "Survey of Ruderal Communities in the CSSR," "Vegetation Along the Highways," "Synantropic Vegetation in Southwestern Sector of Greater Prague," "Content of Weed Seeds in Mold."

#### Knowledge of Dynamism -- Basis of Balance

One of the keys opening the gates to knowledge of ruderals is in the hands of Academician Hejny, director of the CSAV institute at Pruhonice, who formulated the theory of ecophasis (momentary environment of plants), ecoperiod (sum of environments during a time unit) and ecocycle (which is actually the sowing procedure). Apart from fluctuations, the soil and the climate are essentially constant, while agroengineering, fertilizing, plant protection and sowing procedures change. The classification of plant communities requires the

description of dynamism, changeability of the ecotype, its influence on the development of weedy plants. Taking this finding as the basis, the Pruhonice botanists compiled the first classification of weedy plants.

"The communities are different, varied, mutually interlinked, but also heterogenous," explained comrades Hejny and Kropac. "There are different types of supply of weeds' seeds and fruits. An agronomist who sows wheat scatters approximately 8 million seeds per hectare and does not suspect that as many as hundred times more seeds of weeds are already dormant or 'getting started' in the soil. To quantify this bank of seeds is one of the problems which must be promptly solved. In other words, we must know how much of a specific weed we have per unit of area in order to choose the correct procedure against it, in order to regulate it and engage computers in this process in the future. Cybernetics, of course, does not reveal individual relationships. Only man can develop programs which will contain mutual relationships between individual plant communities, soil and man's activity. In the first place, however, we must penetrate even deeper into the essence of life of individual plant communities, to learn their weak and strong points, their life strategy, in order to intervene correctly on time against the weeds in the entire complex of plants. This, so to say, is already our program for the Eighth 5-Year Plan."

To curb weeds is the goal of every agronomist. Some time ago herbicides were regarded as a panacea. This, however, is an extreme method of weed destruction which, according to the botanists' recommendation, should be resorted to only after all other means have failed. To have a clean field -- this is among other things or perhaps in the first place a matter of sowing procedures. Agronomists and those who draw long-term strategic agricultural plans must have clear ideas about it, because if you fail, you ultimately make room indirectly for the weeds, since the balance in the entire system of vegetation is upset.

Barren oat is a typical spring weed that "cries out" among the spring barley.. "How do we rid of this plague? It is easy to give advice," says Comrade Kropac. "I either do not sow barley in the field where this weed grows or I sow spring mixture there. This mixture is harvested while it is green before the barren oat can scatter the seeds. On the other hand, the barren oat is a good fodder while it is green."

It is no accident that voices are being heard today which call for the biologization of agriculture. The sum of knowledge which the Pruhonice scientists have conveyed to theory and practice represents a concrete contribution to the "naturalization" of food production. Their world of weeds which has been mapped in a special herbarium containing 10,000 sheets may seem remote from the events of our world. Let us look, however, at the green around us more carefully. It belongs to us as we do to it. The Pruhonice botanists who are residing in a beautiful park full of domestic and exotic plants have clear ideas about the various communities of vegetation. Through the contribution and effort of agronomists, physicians, mechanical engineers and construction workers their findings must become a material force.

The scientists from Pruhonice deemed it a matter of honor to acquire new knowledge. They are not ordinary hard-working people, but buffs who are fired with zeal for this project and entertain different ideas about so-called "lost time." What kind of loss is it -- they say -- when new knowledge is ultimately acquired? For this reason every applicant for work in their institute must regard botany -- as Comrade Hejny says -- not only as a job, but also as a hobby.

10501

CSO: 2400/373

## WATER POLLUTION DISCUSSED

Prague ZEMEDLSKE NOVINY in Czech 24 May 84 p 3

[Text] The situation of water management in the CSSR is influenced, above all, by the growth of industry, agriculture, housing, transportation, and recreation. Their respective share of current water consumption is very uneven. It is estimated that power and fuels consume 36 percent, chemical industry 25 percent, population 21 percent, metallurgy 6 percent, agriculture and food industry 8 percent, consumer goods industry 2 percent.

In many places the natural self-purification process is broken; about one-third of our streams show evidence of extensive pollution. The pollution of water by refuse from the public sewers, industry and agriculture considerably increased during the Sixth 5-Year Plan. For example, if the index of organic pollution in 1976 was only 0.2 percent higher than in 1971, then between 1976 and 1981 the pollution increased more than 30 percent. Also increasing is the seepage of refuse water into underground water sources. For example, the extensive use of chemical substances in agriculture is responsible not only for the pollution of surface water, but also for the contamination by seepage, especially of nitrates, from industrial fertilizers.

Also increasing is the number of breakdowns, i.e., of sudden contamination of running or underground water; their correction requires a further outlay of unplanned--and often very large--amounts of money. Also increasing is the number of incidents which, as evidence shows, were caused by gross negligence, by indifference and by lack of respect for basic duties and obligations. For example, in one agriculture-industrial plant, throughout 1980 and 1983, there occurred 203 breakdowns. According to the kind of contamination, 32 percent of the breakdowns were caused by sludge, dung-water and manure, 28 percent by the liquids from silos, 16 percent by oil substances, 11 percent by waste water, 4 percent by pesticides, 3 percent by lime-based fertilizers, 2 percent by industrial fertilizers and 2 percent by chemical substances. These are also the basic causes of mass fish killing.

Out of the total amount planned for investments in the Fifth and Sixth 5-Year Plans, only 0.5 to 0.6 percent were allotted for construction of plants for cleaning waste water; the realization reached less than 50 percent. At this



time, about 1 percent of the planned investments is allotted for the construction of water treatment and cleaning facilities. The expected extent of construction of the cleaning facilities in the Seventh 5-Year Plan does not make it possible to start protective construction (of cleaning facilities) near many other major sources of pollution. Therefore, to prevent further contamination of streams, all measures which have been adopted until now in the existing cleaning facilities for waste water must be applied more vigorously and more emphatically. Discipline and order must be enforced consistently to protect the purity of water.

The supervision of water is secured by the Ministry of Forestry and Water Management, as well as by the members of the State Supervisory Board (SVI); their respective inspections reveal a number of serious shortcomings in the operation of both the national committees and the manufacturing organizations. Even in cases where the government gave permission to discharge waste waters at variance with the law, conditions incident to this permission are being infringed. In 1983 alone, an additional 1,900 applicants applied for the exemptions. The inspectors of the State Supervisory Board of the CSR examined 600 of them and proved that the applications were unfounded, carelessly substantiated, used incomplete and sometimes even false data and arguments. In many cases, plans supplied by the directing bodies and supposed to be applied in the breakdown situations, or plans of corrective measures, etc., are not realized at all. Also, the establishment of recreational and sport fishing facilities is often wrongly authorized in areas where water sources are protected.

Proposals put forward by the State Supervisory Board to impose fines for the shortcomings are sometimes cut down in the system of the national committees without any good reason, in a similar way as with fines for offenses against the protection of air. As for new housing developments, respective building licenses include provisions concerning the construction of sewers and water cleaning facilities, and the unloading of refuse in accordance with the Water Protection Law, but left out is the condition that the discharge of refuse water must not be started unless new refuse water is treated in an operating cleaning facility, etc.

The basic causes of ever-increasing water pollution are influenced in the first place by the fact that the government and planning bodies do not prepare the necessary conditions in due time, be it planning (preparatory stages of production itself in terms of both material and financing) or the maintenance of cleaning facilities (including the proper technology). The adopted draft of development of the purification plants for waste water consistently remains unrealized; a number of operations are postponed for different reasons. Also known are cases of outright flaunting on the part of operators of cleaning facilities of operational regulations concerning the required technology. Also, when shortcomings in the operation and maintenance of sewers and cleaning facilities for waste water are discovered, proper consequences in terms of personal liability do not always follow.

As can be seen, there exists a broad range of current problems, and much work waits to be done; but, apparently, also more understanding and responsibility are expected from those who are in charge, make decisions, and get things done. However, we all together must realize what a sufficient supply of clean water means not only for each individual, but for the whole society as well. Without clean water, there truly would be no life.

DIRECTION, ROLE OF ECONOMIC PLANNING DISCUSSED

Budapest HETI VILAGGAZDASAG in Hungarian No 28, 14 Jul 84 pp 34-36

[Interview with Akos Balassa, department chief of the National Planning Office, by Klara Makara; date and place not specified]

[Text] In the first part of our series of articles and the important elements in the further development of economic management, we discussed the enterprise management forms to be introduced in 1985 (HETI VILAGGAZDASAG 7 July 1984). These forms are the organizational prerequisites for improving the income-producing capability of the economy, the essential condition of which --as is evident from the party and state documents which have appeared recently--is more modern, democratic planning. What is the direction of development for economic planning?--we asked this of Akos Balassa, department chief of the National Planning Office.

[Question] Enterprise independence and the increased role of the market are perhaps the most emphasized and detailed points in the further development of the economic management system. But then what is the role of economic planning?

[Answer] In brief, I would put it this way: the economic plans contain the basic socioeconomic goals and the most important state decisions for their realization. The preparatory-analytical work necessary to determine economic-political goals is being carried out in significant part within the framework of national economic planning. We analyze the past development of the economy, its present situation, and we try to forecast the development of future and external conditions. On this basis and by taking into account economic laws we outline the possible area of mobility for economic policy, reveal the possible versions of economic policy, the advantages and disadvantages of these versions. Thereafter we make recommendations on the course that should be followed. The economic-political decisions are made by the party and the leading state bodies. Following these, we need to concretize the economic-political goals as economic tasks in the plan, and we have to adjust to these--to put it more exactly, coordinate with these--the regulatory and other guidance means.

[Question] In the further development of the management system can we expect change in the content of the economic plans?

[Answer] As for the 5-year plans, the scope and nature of the decisions will not require basic change. But the plans must give better expression to the main economic-political goals through the manifold revealing of social inter-relationships, and they must create harmony between goals and means more circumspectly and consistently, and in the system of applied means, the application of indirect means, market influences, and enterprise independence must be given greater importance. The plan must also concern itself with the mutual effect of the organizational decision-system and the economic processes. The content of the annual plans has also been developed, but studies have drawn attention to the fact that in the past several years the scope of operational state decisions going into the plan widened. This is related to the more difficult equilibrium situation of the economy. As we are able to achieve improvements in the equilibrium we shall also be able to narrow the scope of operational, economic-organizational decisions in the annual plans.

[Question] Nowadays it is particularly difficult to foresee the world economic and technical processes that will affect us. How does planning react to this condition?

[Answer] As we see it, we need not change the time frames--that is, whether we have long-term (20-year), medium-term (5-year) or 1-year plans--but we do have to change the planning work. In long-term planning we study more fundamentally the first 10-year period. When preparing the 5-year plan, we analyze and plan in greater detail for the first 2 or 3 years, and some of the economic decisions also are made for these same years. This is also how it was done in the case of the current Sixth 5-Year Plan. In this way a characteristic mingling of short- and medium-term planning is developed. When the plan for the third year of the 5-year plan period is being prepared, the work is not directed only at the one year but also extends to the remaining part of the medium-term period, and this is also the case when the plan for the fourth year is being prepared. This makes it possible to make decisions where these were previously delayed in the middle of the plan period, and where necessary modifications are made in earlier decisions. Something similar is developing in the operations of annual planning, and thus the planning work is becoming more and more continuous.

[Question] Is it actually one plan that you are perfecting or do you keep more than one plan version in the files in case the market cycle changes in an unexpected way?

[Answer] In working out the plans it has become constant practice to study various versions. The development of external conditions is one of the group of factors by which the versions vary. Another is the internal economic political and management actions, or the effects they may be presumed to have.

We need to devote increasing attention to the latter type of versions. When the economic plan is approved, they choose at the same time the condition group which is regarded as the most likely, and they make decisions on what appears to be the most advisable actions among these. But foreign economic or other factors do not develop unconditionally as expected. Therefore, in our more recent economic planning we have also developed lines of action for cases when certain conditions differ from expectations. Of course, we cannot rock ourselves into the illusion that in this way we are able to foresee every possibility and can be prepared for every contingency. We need to know how to change the earlier determinations.

[Question] In the guidelines for further development of economic management, special emphasis is given to strengthen the democratism of planning. Could changes in the approved plans present a small opening for democratic forums?

[Answer] The 5-year plan is approved by Parliament, which is itself a democratic forum, and the 1-year plan is approved by the Council of Ministers on the basis of authorization from Parliament. But responsibility for carrying out the plan is the government's, or the organs of the government, and in this a particularly important role is played by the State Planning Committee and the Economic Committee. Of course, economic planning requires professional knowledge, studies, proposal development, and therefore it is basically the task of planning organs. In the past period an increasingly greater role has been given to social participation in economic planning. First of all, we have sought the opinions of the social interest representational and professional organizations. In preparing the Seventh 5-Year Plan we will need more vigorous development of social participation and the interest exploration and coordination based on it. The essence of the matter is this: We should not ask for opinions only when the economic plan is essentially ready, but rather from the very beginning of the planning work we should draw in the social organs. We have just now developed the economic-political ideas for the Seventh 5-Year Plan. These have been debated by the entire social interest representational and professional organizations, among others the National Council of Trade Unions, the Chamber of Commerce, the Federation of Cooperatives, KISZ [Hungarian Communist Youth Federation], the National Council of the People's Popular Front, the Economic Association, and the leading body of the MTESZ [Federation of Technical and Scientific Associations]. Hereafter every organization will deal in greater detail with the partial concepts that directly affect them: SZOT [National Council of Trade Unions], for example, will deal with the management system and the living standard and policy concept, the living conditions of the population, and concrete proposals affecting social policy. The Hungarian Academy of Sciences will discuss, above all, the concepts indicating the main lines of scientific research, and the research plan. Among other things, the Hungarian Chamber of Commerce will discuss the industrial political, constructional industrial concept, and the foreign economic concept. The cooperative federations will put under a magnifying glass those parts of the living standard policy that affect cooperative members, and ideas regarding cooperative development. Debates will also



be organized within the framework of the Patriotic People's Front regarding health development; education policy will also be debated within the framework of the Hungarian Academy of Sciences, and so forth. The social organs will accept suggestions. Thereafter the planning organs will study the questions that have been raised, weigh the concrete proposals, and if possible build them into the plan. If there are important differences of opinion at the leadership level even after coordination, we will ask for the decision of the political bodies. Wider subclasses of society will also be drawn into the planning work by the fact that we have given--in long-term planning and the working out of the Seventh 5-Year Plan--commissions to various research institutes, which help the planners to develop independent forecasts, ideas and proposals.

The role of Parliament will also be increased. We will inform its committees, above all the plan and budget committee, and also other affected committees much earlier than before on the results of the economic planning for the various time ranges as well as for the 5-year plan that is now being developed. The committees will have a way to express their views at a time when ideas are being formed, and thus the drafters will be able to take into account the opinions of the representatives.

[Question] Does the planning organization help in seeing that those who--besides their own members--participate in the planning and decisionmaking are truly informed? That is, do they establish a solid basis for democratic decisionmaking through appropriately multifaceted information?

[Answer] I believe that we have also up to now informed appropriately the leading political bodies about the main questions, but clearly we must improve this information in respect to showing better how the various economic processes affect certain subclasses of society. For this we need further development in the methods of statistical and planning work. As for the information of the social, interest representational and professional organizations, but also--I shall go farther--of the councils and the most important enterprises that should be drawn more actively into the planning work, we must take care to see that they receive information that is more prompt, complete and detailed.

[Question] What will be the change in enterprise plan preparation, that is, the relationship in subbranch and national economic planning?

[Answer] Since 1968 subbranch plans have not been included in the Hungarian planning system. In fact, there is no need for them, the economic plans contain the economic decisions affecting the subbranches, while the nonstate decisions in the producer sphere belong in the enterprise decisionmaking sphere.

At the same time, subbranch planning is one of the important elements of economic planning as is "functional-type" planning. The national economic plans are developed on the basis of the coordination and synthesis of various



approaches. The individually affected enterprises will participate in a more manifold and responsible way in the preparation of decisions in the economic plan affecting themselves directly. Moreover, it is also necessary in practice to see to it that the enterprises work out, independently and with full responsibility, and approve their own plans, in the light of decisions of the economic plan or economic regulation.

[Question] Even if there were no subbranch plans, it was still a custom in the ministries to gather and coordinate annual and medium-term enterprise plans.

[Answer] The state guidance organizations must now inform the economic organizations more regularly than before of the thinking in the economic plan, the analytical results, and they may also provide forecasts. They must indicate the planned changes in the regulatory system. This does not release the enterprises from the responsibility of continuously studying the external and internal conditions of their activity. It may be justified for the subbranch guidance organs to lend certain procedural assistance, but in no way is the use of the procedural prescriptions obligatory. Unfortunately, such cases have occurred frequently in recent years. We must put an end to the practice that several subbranch ministries conducted formerly of regularly calling in the plan data of the enterprises to collate and work them out. There was not much use for this, but it created in the enterprises the impression that the ministry could later call the enterprises to account for the fulfillment of plan indexes set by itself. Therefore, it seemed to be in the interest of the enterprises not to report data expressing their actual intentions, but indexes whose fulfillment would not run into difficulty. But if they were pressured by the high authorities to plan indexes with this or that content, it cost them nothing to come up with these plans, for in the final analysis they were not responsible for their fulfillment. The state guidance organs, of course, must be informed of the enterprises' basic efforts, but this matter can be solved in another way: with representative surveys, and moreover through research institutes and the Hungarian National Bank. We also desire to change the practice of ministerial consultations on enterprise plans. In the 1970's a harmful practice gained ground: the ministries organized consultations on the medium-term and annual plan ideas of almost every enterprise. In certain cases these consultations are purposeful, when it is a question of the activities of the most important and biggest enterprises, where state-decision developments are being conducted or where operation is possible only with state support. In other cases it is advisable for the enterprise to ask the guidance organs for consultations--if it deems them necessary--but the views expressed at these talks are, of course, not obligatory on the enterprise.

[Question] How do the agreements between the state organs and the enterprises fit into this concept--I understand almost 100 of them were signed this year?

[Answer] In my view the agreements must not be made into a general system because this would flout enterprise independence and undermine the flexibility of management, and because another agreement would be necessary for every new decision or change in decisions. It is justified to sign agreements with those enterprises which--whether for their current development activities or perhaps exports--share in one-time state supports. Such agreements are necessary in order for the obligations of the enterprises to be made clear. It must be fixed in the agreement what goal the state and the enterprise expect to achieve from the support and--in the case of current supports--when and in what way will the enterprise operate without supports.

[Question] Most of the CEMA relations which are so important in the Hungarian economy are embodied in interstate agreements. How can these be fit into independent enterprise planning?

[Answer] We will draw the affected enterprises into economic plan coordination and into the working out of the Hungarian position. But when we accept the obligation--generally in agreement with the enterprises concerned--it assumes the form of an interstate agreement and our planning system regards it as a state decision. Taking into account pertinent state decisions is already obligatory in the enterprise plans, while the fulfillment by the enterprise of indirectly pertinent agreements is attained in some other way by the state organs. They take care in the given case to see that the Hungarian export which has been undertaken is profitable for the enterprise.

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CSO: 2500/507

# HUNGARIAN-JAPANESE ECONOMIC RELATIONS NOTED

Budapest NEPSZBADSA in Hungarian 17 July 84 p 5

[Article by Lenke Elek: "Hungarian-Japanese Economic Relations--Awaiting Development"]

[Text] In international economic circles Japanese businessmen are famous for their thoroughness, analyses, and rapid information exchange that always precede a given investment or commercial decision.

We have only rather recently had the opportunity to make ourselves more familiar in practice with the style of the Japanese; our first commercial-navigation agreement was signed in 1975, and since then Hungarian-Japanese economic cooperation and commodity trade have been accelerated, although in its dynamics some occasional slumps have also been evident.

## Inequality

It is well known that Japan achieved considerable economic success not only in the previous decade but also in the 1980's. Although economic growth has slowed down since 1982, the Japanese have succeeded in maintaining stability. We could state the major economic policy goals of the Japanese Government for the near future as follows: stimulation of the economy by expanding domestic demand; market-opening measures; greater incentives to imports; provision for capital influx; strengthening of the yen's international role international cooperation.

Hungary, too, will participate in the latter goal, although not as the leading Japanese partner, of course. Of Hungarian exports to the developed capitalist countries 0.9 percent goes to Japan, and the Japanese share in our imports from the same sector is 3.4 percent. In our commodity trade with developed capitalist countries (exports) Japan holds 16th place, but in imports it is in 9th place. According to Hungarian statistics--last year's data--Hungarian exports amounted to \$25.5 million, and imports to \$99.5 million. (Actual trade varies from this somewhat because of third market operations, purchases from European affiliates, and accounting time deferment due to delivery.)

Last year our agricultural and food industry exports grew moderately; a new item of ours on the Japanese market was frozen foods. Good marketing opportunities are indicated in aluminum. We have started on a licensed basis the export of several important pharmaceutical basic materials such as, for example, Cavintone. Our chemical exports have declined primarily because of quality problems, but our machine industry deliveries have moved off of the starting line. In the field of consumer items the picture is varied: trade in automobile headlights has stabilized, and several business opportunities show good promise, such as the export of Ferunion glass. Our textile industry exports have also been expanded.

#### Exploiting Reserves

This was the recent past. Regarding business opportunities of the future, we can say that because of commodity base problems our food industry exports will not be increasing, but hope for expansion in pharmaceutical and machine industry exports is well founded, taking into account third market cooperation possibilities. Of course, the extent to which Hungarian commodities will go to third markets with their cooperation also depends on the skill of the famous Japanese commercial houses.

There are still many unexploited possibilities in our economic, industrial and technical cooperation. Four enterprise cooperation agreements are still "alive": for the manufacture of machine tools, pharmaceuticals, and incandescent lamps. Discussions are also underway in other areas for the establishment of cooperative projects or mixed enterprises. Apparently, the Hungaria Plastic Processing Enterprise will sign tomorrow with the participation of Japanese capital an agreement on establishing a mixed enterprise.

#### Our Office in Tokyo

Let us mention briefly several important recent developments in Hungarian-Japanese interstate agreements. A \$200 million credit agreement signed with 10 Japanese commercial houses in 1977 has been extended for 2 more years. The Hungarian National Bank has opened a representational office in Tokyo. Among the important events we must also mention the meetings of the Hungarian-Japanese Economic Club, at which timely questions of cooperation and commodity exchange are on the agenda.

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CSO: 2500/499

# HUNGARIAN-JAPANESE MIXED ENTERPRISE ESTABLISHED

Budapest NEPSZABADSAG in Hungarian 17 Jul 84 p 5

[Article: "Hungarian-Japanese Mixed Enterprise Formed"]

[Text] Agreements on establishing a mixed Hungarian-Japanese enterprise were signed Monday at the Intercontinental Hotel, as approved by appropriate authorities of the two countries. The charter documents for the enterprise, to be registered as PoliFoam, were signed by Erzsebet Feher, director of the Hungaria Plastic Processing Enterprise; Laszlo Sipos, deputy managing director of the State Development Bank; Sandor Demcsak, managing director of the Hungarian Foreign Trade Bank, Inc; Taizo Kanai, commercial managing director of Furukawa Electric; and Michio Sato, commercial director of the C. ITCH commercial house. The ministerial adviser of the Japanese Embassy, Saburo Tanaka, was also present.

After the signing, the participants held a press conference on the circumstances and tasks of establishing the new enterprise.

The mixed enterprise--which is the first producer enterprise operating in Hungary with Japanese capital--will manufacture completely new products. It will produce annually from Hungarian basic material 20,000 cubic meters of space latticed (terhalositott) polyethylene foam discs and will manufacture secondary products made of these. The new plastic product, the use of which is spreading globally at a rapid rate, can be used for many different purposes. Because of its exceptional insulating strength it can be well used, for example, in the construction industry, but it is also usable for sports equipment and packaging material.

Eighty-six percent of the capital stock in PoliFoam is Hungarian, 14 percent Japanese. Most of the equipment is being supplied by Furukawa Electric, which also provides the technology and the manufacturing procedure. The firm will help the work of the enterprise in technical development and application techniques, and will also transfer knowledge about production organization and the development of management and Japanese working methods. It will be largely due to this that the mixed enterprise will work with outstanding productivity; the value of annual production will come to 3 million forints per person.



The new products are intended primarily for domestic consumers, but with the help of the C. ITOH commercial house a part is intended for sale abroad. By dint of domestic consumption it will be possible to save almost \$1 million in imports in the first year of operation. It will not be necessary to construct a building for the new factory--the machinery will be placed in an existing area belonging to a Budapest house factory. It is expected that the new enterprise will start production in the first quarter of 1986.

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CSO: 2500/499

# PENDING REORGANIZATION OF BANKING SYSTEM DISCUSSED

Budapest KOZGAZDASAGI SZEMLE in Hungarian No 6, Jun 84 pp 704-713

[Article by Maria Petsching, deputy department chief, Hungarian National Bank: "Bank-of-Issue Problems in the Banking System"]

[Text] The key question in the further development of our economic guidance system has become, particularly in recent years, the transformation of the organizational (institutional) system. In addition to the restructuring of the organizational limits of enterprise operation, there was (is) opportunity also for certain reorganization in state administration.

The institutional reform processes which have been going on for several years have two main characteristics which determine the quality of these operations and influence their success:

--on one hand, as the present centralized system was established on the basis of guidance from above, the decentralization processes in the present phase of our development are also being conducted at the initiative of the upper economic management, and largely with its guidance;

--on the other hand, measures taken slowly over the past two decades and directed at the further development of our economic guidance system are in many respects uncoordinated in time and content for various economic and political reasons.

Because of the first characteristic we have to reckon with the indifference to (if not an attitude of internal rejection of) the lower level (to which the measures are directed); the second characteristic presents us with the problem of synchronizing the various measures. The program which by 1985 intends in a concentrated way to make the operation of the entire economic guidance system more perfect is aimed at making changes in this second characteristic. This plan, which promises to be very far-reaching, will also prescribe the further development of the banking system, which is one of the important pillars (and can be made even more so) of our institutional system.

The transformation of the banking system is directed above all at the central reorganization of the MNB [Hungarian National Bank], and the institutional separation of its bank-of-issue and credit-bank functions. The characteristic feature of this planned reform measure is that the idea of necessity came "from the outside" and not even at the suggestion of the top economic and political leadership. From the literature on the subject it appears that bodies outside the bank organizations deal more with the problem of the bank system than the bank system workers themselves. But in reform efforts (and in economic measures as a whole) the human factor cannot be shaped by a deliberate act of will.

There are at present two ideas regarding the transformation of the MNB. According to one, the MNB should be transformed into a two-level banking system uniting the bank-of-issue and the credit-bank functions into one organization, with the other level consisting of commercial banks competing with one another. According to the other idea, the separation of the two functions should take place within the present national bank framework. The inventory of means for bank-of-issue regulation should be developed gradually, and decisions could be made on the basis of experience regarding further steps in bank-of-issue guidance and commercial-bank credit loans.

Independently of the concrete course of implementation, it is advisable to think through the bank-of-issue and credit-bank functions in general, or concretely under our conditions. In this study I shall deal only with one of these two functions, namely, with developing the substantive content of the bank-of-issue function. On the one hand this is because it appears to be less clarified, and on the other hand from the viewpoint of the operation of the guidance system as a whole its substantive definition is particularly important, because its consequences also influence the fulfillment of the credit-bank function.

### Historical Parallel

In a capitalist economy the central bank for carrying out the bank-of-issue function is the result of spontaneous economic development, an organic consequence of the institutionalization of the requirement for the bank-of-issue function. In general, the strongest commercial bank was invested with this role, at first primarily for the realization of a monopoly for the issue of bank notes and later to mediate the ideas of state economic guidance. In the capitalist economy, therefore, the bank of issue was built from the bottom up in such a way that the requirement for it matured in a market economy, and the institution was created thereafter to fulfill the bank-of-issue functions. We cannot point to a similar, clear line in the development of the banking system of the socialist countries. As they sought their economic course, the individual socialist countries made various attempts at developing their banking systems. In the Soviet Union, for example, they tried almost every method. At the end of the 1940's, following the Soviet model, Hungary took on the single-level version of the banking system, in which the central bank unites

the functions of both a bank of issue and a commercial bank. Thereafter in the direct guidance system--as compared to the classical operation--both functions became distorted, the disadvantageous consequences of which the experts began looking into only with the introduction of the new economic mechanism.

The single-level Hungarian banking system did not crystallize in the organic development of the economy, but as a subsystem of production relations rebuilt with political force. As it was established, it fulfilled the function imposed on it from above in economic regulation and the institutionalization of a money role that was made passive. In regulation built on the primacy of the plan this banking system, which was called on for the financial support of the plan, performed good services. And let us add that the idea would not have been bad if the plan guidance had been able by itself to guarantee proportional development. In this case, to be sure, it is actually better if the financing organ "does not argue" and does not present its own divergent concepts, but gives in to the commands of the plan.

Now with the further development of the economic management system, proposals are being made to reorganize the MNB as well; but what is actually happening is that despite the unchanging (or at most changes conceived in intent) external (production) conditions, they are initiating the break-up of the institution. In fact, there was no essential change in the conditions determining the passive role of the bank of issue/credit bank. The operation (running) of our economic system on a hierarchical basis was not terminated, the pressure of the budget and the economic plan on the bank did not decrease, and there was no change in those conditions which shape and determine enterprise behavior and which Janos Kornai includes in the category of soft budgetary limits.

The concept for the next steps in the economic reform seeks to achieve the further substantive development of the operational processes in our economy by means of principles conceived to this end, by the application of new means and the reorganization of the institutional system. The organic part of the process that has been put into the plan is the transformation of the banking system. This would be the kind of step within the institutional system of economic guidance from which the development of "more market" substance to the economic processes is expected.

It is a fact that a change in form promotes in general the carrying out of substantive processes, particularly if the basic substantive indications have matured even prior to the change of form and if the form has something on which to build. In this case the change in form will speed up the desired substantive advance. But there is also a kind of mutual interrelationship between form and substance when their effect on each other is conducted essentially within the same process. In transforming the banking system we may presumably count on the latter instance occurring, but only if the further development of the reform processes actually forces such effective changes as are necessary to create the external conditions for a banking system developing in the two-level direction. Otherwise, the outcome of the change in form will be uncertain.

In reality, there are at present mature ideas about the functioning of the bank organization financing enterprises at the second level; these are centered on the ideas that the creditors should make more responsible decisions, the credits should be more flexible and should not be adjusted to external determinations, that is, the credit should actually be linked to the profitability criterion.<sup>1</sup> (Let us add that by itself this would not require an organizational transformation, this is how we already should be granting credits, and in principle the fulfillment of this requirement is not excluded.)

As compared to this, it is by no means clear what should be the tasks of a bank issue, and how the so-called bank-of-issue functions should be realized. It appears that an organization of the future is seeking its own prospective functions. The circumstances of birth for this bank of issue visibly promise to be entirely different from those that existed in the capitalist economy. On an institution developing in an organized way from above they put those requirements whose functions in the capitalist banks are matured in the process of organic development. In our case, with the external or internal break-up of MNB activity it is not enough only formally to separate the bank-of-issue and the credit-bank functions from each other. The analytical studies on bank activity show that in response to the external environment the bank-of-issue functions "withered away" earlier.<sup>2</sup> Thus we are not saying that an existing function cluster is seeking its own institutional framework because it will no longer fit in the existing one. Rather, we are saying that substantively the bank-of-issue system will have to be shaped hereafter. It cannot be disputed that a system may also advance in this way. But such guidance of a system from the outside is successful only if the premises are well defined and adequate both to the external and the internal environment of the system.

#### The Parallel in Institutional Roles

In drawing a parallel--to help in a review of the whole--I can only depict in a rough and sketchy way the capitalist institutional system, and similarly the present Hungarian institutions are highlighted to characterize the socialist economy in such a way that I shall compare the role of a bank of issue in the present developed capitalist countries with the MNB that at present carries out bank-of-issue functions, or with the activity of a bank of issue presumed to be made independent.

Although in the present developed capitalist countries the effort at market limitation can be clearly shown, the entire system is still built more on horizontal market relations than on a vertical structure. Organically linked to production in the broader sense is the commercial bank network, which can extend credits to the enterprises primarily from a business point of view. To be sure, the role of the bank of issue is multidirectional, but in the final analysis it is called on in all its activity to bring some kind of regularity into the spontaneous market mechanism. Therefore, the bank of issue carries out tasks of economic organization and is the monetary mediator of state economic policy. Aside



from the fact that because of the spread of Euro-money and foreign-exchange markets the regulatory scope of the bank of issue has been restrained, the bank of issue through its monetary management fulfills a function of economic guidance.

When we look for the position of the bank of issue in the capitalist organization system, it is not advisable to enter into debate over the extent to which its economic guidance function is successful. By examining its social situation, it can be stated on one hand that it is independent of the enterprise sphere of making real decisions and of the bank network that finances this sphere, and on the other hand that it has relative independence within state management as well. Despite strong and direct money channels, an undoubtedly central role is played in this by what is in fact named the central bank. When a socialist economy was established in Hungary, enterprise activity did not develop in the power areas of market relations but in the state and administrative system. Its operation would have been disturbed to a considerable extent if a kind of monetary regulation had been developed even as a medium guidance. Natural plan guidance had to eliminate monetary guidance. The economy functioned according to plans and expectations that were built upward from below and guided downward from above, and it was integrated into the plan-expectation system, and on this position even the newly named economic mechanism made no change. Today the MNB plays the role imposed on it in the economic guidance system a little less openly at most. This manifested itself, for example, in the fact that while the realization of monetary points of view was gradually strengthened in the planning and budgetary work, resolutions have been passed in recent years (under the title of a purchasing power regulation), the execution of which is foreign to the function of the credit bank.

Adjusting to the operational system of the economy, the MNB became an organic part of the plan economy. It had to satisfy the demands of the upper level and in addition it had to adjust to the real decisions of the lower level. In its commercial bank function, market commercial-bank credits were eliminated, for in satisfying the mediated requirements in the form of the plan or expectations, market consideration lost some of its importance. The bank-of-issue function became a fiction not only because quantitative credit management became impossible but also because it was taken over in effect by plan management. Today the bank-of-issue function is manifested substantively with the development of economic policy, the plan and the budgetary goals in such a way that the MNB is also drawn into these operations. In the process of execution, however, the MNB may at most realize independently several features of the bank-of-issue function, for example, a monopoly on the issue of bank notes or role of the state banker. It would be unjustified, however, to ask the MNB to give an account, for example, on its success "in guarding the purchasing power of the forint." We could also put it this way--in present practice the bank-of-issue function in the classical sense is not performed by the bank of issue. The role of the bank of issue has been factored out, and it is the big question of bank reorganization whether the form that is now being developed will be capable of reuniting it institutionally.

We must perceive that this depends not only on the bank, although it, too, must face this problem. We must perceive that the institutional revival of the bank-of-issue functions cannot be a purely organizational step, but a measure which in part assumes and in part forces the monetization of the economy.<sup>3</sup> The basic question is not whether the Hungarian bank system should have one level or two but whether there is (or is not) firm intention and enforced action for the redistribution of the role of economic guidance. Lacking this, it is almost of no interest from the point of view of the operation of our economy whether something is going to happen to our banking system. We are speaking here of coordination by monetary guidance of the guidance means that have been developed for our economic management system, and of the economic plan as well as its extent and form.

Depending on the outcome, two solutions of widely extreme value are possible. One is that the monetary sphere--by regaining its relative independence--fulfills an actual economic regulation role in the generally monetized economy. In the other extreme everything remains the same, and an organizationally developed bank of issue will be all the more in the service of central decisions, including the lower-level decisions that frequently are arrived at centrally. The fulfillment of the first version assumes that the present vertical structure of the economic operation that follows the laws of hierarchical structure will develop as horizontal market relations which, as is well known, cannot be introduced merely by statutory provisions. We have been working on its establishment for decades.

#### Bank-of-Issue Regulation Conditions

The classical (capitalist) bank-of-issue regulation is based on the assumption that the bank will exercise influence on the decisions of the creditors and debtors by means of important factors that influence the money supply and demand of the bank. Its inventory of means is called on basically to reduce the amount of money (to restrain the upswing) or to encourage expansion (to encourage the upswing). Although bank-of-issue regulation by no means exerts its effect as described in textbooks, still the fact that monetization in various countries has been strengthened recently indicates that regulation is by no means without a chance.

The success of bank-of-issue regulation depends on whether the bank of issue--with the mediation of the commercial bank sphere--is able to influence the decisions of economic subjects. The bank-of-issue intention finally reaches its goal if the financed organizations are not only hungry for credit but are also profit-(cost-)sensitive. Income sensitivity is also the basis of money hunger, which in the final analysis is the financial projection of the growth compulsion. In the case of expanded reproduction--and unchanged speed of commercial exchange--the money demand on the bank of issue increases.

How could the classical means of bank-of-issue guidance be realized in Hungary?

As a general approach let us start from the following concept of Samuelson (with which he wanted to characterize the policy of the Federal Reserve Board): "Most monetary policy works against the wind of insufficient or excessive demand in order to promote in this way optimum real growth and the stability of the price level."<sup>4</sup>

But is there such a thing as insufficient demand in Hungary? Let us begin by saying that in socialist practice demand does not always mean demand with ability to pay. Frequently those demands and requirements which are in time made payable close the gap with demand that already has the ability to pay. Most of these are not designed to meet the small demands of small consumers, but represent important intervention that affects the operation of the whole economy structurally and over the long run. In the books by Janos Kornai--Eroltetett vagy harmonikus novekedes [Forced or Harmonious Growth]--and Tamas Bauer--Tervgazdasag, beruhazas, ciklusok [Planned Economy, Investment, Cycles]--we receive an answer to the question of what motivates the fact that in the socialist economy the problem is not insufficient demand, but on the contrary excessive demand.

One way of countering the "wind of excessive demand" is by increasing interest, rates which--according to market logic--restrain the demand for money. The coming to pass of this influence assumes the interest sensitivity of the economic sphere. But in Hungary--as shown by many studies--the organic creative element of enterprise cost insensitivity is indifference. In this way an increase in interest costs--as opposed to the assumption by Samuelson--does not exercise "...significant regulatory effects...on the investment and other components of  $C + I + C$  expenditures."<sup>6</sup> Without market price restrictions these would only bring on a reduction in the purchasing power independently of everything else--an "interest inflation" spiral would develop.

The success of money market regulation which occurs through open market operations depends onto only on whether legal institutions make it possible or not to issue and circulate securities but much more on whether there is a demand on the money and capital market (by those with a buying and selling capability). Among Hungarian enterprises up to now the choice between accumulation in money and real capital has not been characteristic. Neither with an interest policy nor with budgetary regulation were we able to achieve a situation whereby the indicated directions of investment shape the subject of consideration. On the contrary, the tapping of the enterprise treasury as practice over many years and the social gains made through investments strengthened the idea that money accumulation over the long run is the worst business decision.

Money regulation by way of the reserve rate is also regarded as distinctly crude intervention by middle-class savers, and therefore is not used over the short run. It would not be possible for us to influence the money supply in this way, either, because the government--in its money economy, too--is capable of financing its decisions, and the reserve rates need to be primed only subsequently.

In theory, the regulation of the bank of issue would mean that a neutral guidance would replace regulation based on planned, natural decisions and various manipulations and bargaining. The entrepreneurial funds given incentive by the break-up of the MNB, associations for money financing, and the establishment of a bond and share market outside of the MNB are efforts designed for the realization of such guidance.

Different investment guidance would mean a substantial change in our avowed attitudes of capital allocation. Even according to the 1968 reform, investment policy cannot be put entirely under market guidance. The idea presumably derives from W. Brust, according to whom the operation of the law of values has two spheres: regulation of the given production apparatus, and developments where one must disregard the postulate of the law of value. This would give expression to the advantage of the socialist planned economy over the anarchy of the capitalist market. Generations have grown up on this theory, which in its time was undoubtedly progressive as compared to earlier views.

A post-analysis of investment policy in various economic development cycles shows that with inappropriate capital allocation based on central planning it is possible to cause at least as much anarchy as it would if we were to leave capital movement to spontaneous market forces. The plan at the center of the guidance is not built on market (international) forecasts over the long term and on the weighing of real conversion chances, for there is no disciplinary means to enforce this.

On the one hand, the condition for a possible monetary policy is that top-level government demands should not determine a priori the creation of credit and its directions, and, on the other hand, that those at the lower level of the hierarchy should be credit-sensitive. For this, it is not only necessary that the enterprise credit ranges should be expanded but also that the enterprises should be sensitive about taking credit. Enterprise decisions must not be made in order to meet various top-level expectations, the consequences of which are not accountable. And, of course, another condition is that those who make economically wrong decisions should not be able to pass off the consequences with ease on their environment.

Thus far I have approached the conditions for successful bank-of-issue regulation from the aspect of the final user of the money (in this sphere the conditions are harder). But the quality of commercial-bank credit loans is not a negligible factor. In the case of reorganization this will, for the time being, be an internal question of the MNB, for which it must prepare itself. The break-up of the banking system also means, to be sure, the modification of monetary guidance, the exchange of quality guidance with its volume guidance.<sup>7</sup>

At this time the above-listed conditions are lacking in our economy. It is a fact that there are ideas about establishing them in a concept regarding the further development of the guidance system, and the transformation of the banking system is also a part of this very important plan. It is a



fact that every reform effort thus far has been designed actually to establish the indicated conditions. It is a fact that somewhere we have to begin the transformation of our economy's operation. In fact, this "somewhere" has to mean "everywhere": instead of the reform patchwork we must span the entire economy. But it is clear that up to now every such effort has stopped short (otherwise we would not have to keep returning to it). The reason for this is not a lack of variety in forms in the reform proposals but the fact that we have not been able to draft the guiding principles in a consistent way and even less to carry through the announced intentions consistently. In part, this experience should warn us against expecting miracles (particularly when the economic and social conditions for further development of the reform are less favorable today than ever before), and in part, it shows that every postponed or simulated reform forces us to achieve under increasingly difficult conditions results with measures different from those we have taken up to now. A basic question is how it will influence the attainment of the macro-level plan goals if we entrust the economy to the market-regulating mechanism. There can be no doubt about the desire for improvement and the progressive intentions in the theoretical statements that have been voiced in this area, but their practical implementation is an entirely different matter. János Kornai pointed to the problem in a striking way: "The market and the bureaucracy are not soda and wine which can be mixed according to taste; you can make out of it a small spritz [equal amount of wine and soda] or a big spritz [two parts wine one part soda] or a housemaster [3 parts wine 2 parts soda].<sup>8</sup> Two corollary problems should be taken into account from the point of view of the indicated problem, namely, whether we

--should permit the enterprise and individual statuses to be differentiated on basis of achievements, or

--should put natural decision clusters and monetary guidance together in the vertical or horizontal relationship.

Up to now we have not succeeded in giving an unequivocal answer to these questions in our economic practice.

If the conditions necessary for realizing bank-of-issue functions are lacking, there are two possibilities for the reorganization of the MCB that we are discussing.

1. In effect, nothing happens, the results of economic operation do not increase, the upper and lower organs merely adjust their interest-implementation efforts to new frameworks. In this way the transformed bank system becomes merely a simulacrum of the conceived functions. The amalgamation of the industrial subbranch ministries may be an example for this possibility. This was done, among other things, to eliminate the direct institutional system of subbranch implementation of interest. But as it became apparent in continuing discussions on the further development of economic management, the practice which developed in the new Ministry of Industry differs from the principles conceived at the time the ministry was established, the harmony of tasks and means is



lacking, and in effect the old order continues to exist within the new institutional framework. It was proved that economic management cannot in itself be changed with one slice.

2. It is also possible that, if the bank system is transformed formally into two levels, it will start something, particularly if new regulator elements realized in other areas of the economy are also put into motion. We cannot exclude the possibility that the position of the independent bank of issue which realizes monetary points of view will be strengthened in the course of economic-planning operations, and we also cannot exclude the possibility that the volume-regulation of credit will become a force exerting discipline on credit allocations. At present we can discuss only philosophically the question of whether the altered form will have content-changing strength or not. From the system-theory point of view there is a chance that the seeds of the new content will take root and that the disciplining strength of the new form will be greater than its disorganizing effect. It seems to support the hypothesis that the transformation of the bank system will be a greatly important measure in the institutional system of the economy, and that the present hierarchical structural relations will not be able to remain indifferent to it. The compulsion to take the step may be forward-leading.

#### Bank-of-Issue Functions

The tasks of the present bank of issue will outgrow the issuing of bank notes and extend to the development and realization of monetary policy as a whole (and in the case of nonconvertible currency, foreign exchange policy related to foreign countries). Accordingly, bank-of-issue functions have at least two levels. One is formed by the general goals of the bank of issue, the other by the concrete means of attaining these goals. It is important to clarify the differences in the two questions in order that we may judge the activity to be expected from the bank of issue.

The general goals of the bank of issue agree with the general goals of economic policy: for example, it must help with its own means the optimum growth of the economy, the optimum development of employment, the rise of living standards, and so forth. To this extent the bank-of-issue function is a national economic function. We must emphasize the most frequently mentioned function listed here: the protection of the buying power of the national currency. (This requirement derives, of course, from the well-known mechanism of creating credit money. However, we must see that this requirement is unreal if the bank hardly has effect on the internal and external processes of the economy, and if monetary policy is not realized in the formation of the main ratios.)

In substance, the bank-of-issue function that can be conceived at the first (so-called general) level is no more, therefore, than the service of general economic goals from the aspect of bank-of-issue guidance, which may be realized with the means of concrete tasks expressed at the second level. The formal bank-of-issue task at the general level is the issuance of bank notes. It may be called formal because in the credit-money system

system there is no need or possibility for the volume regulation of bank-note issuance (which would mean the substance of the function). The bank note cannot be exchanged for precious metal money, and therefore it is unnecessary to prescribe a bank-note ceiling. Its realization is made doubtful, in any event, by the fact that the creation of money occurs in the form of accounting-money [szamlapenz] creation and the ratio called in as bank notes determines the requirements of the real economy.

In fulfilling the general bank-of-issue function, the bank of issue has relations with three groups of (domestic) economic subjects, and these relations may be labeled as the concrete bank-of-issue area of tasks.

## 1. The Bank of Issue as the State Bank

The bank-of-issue area of tasks is broad. The bank of issue handles the state's money. The bank of issue may have an active or passive relation with the state. The quality of this relation depends on the distribution of roles between these two, which develops in every system historically. In the case of a passive relation, the bank of issue carries out the decisions of the state (as made in its organizations). The substance of an active relationship is indicated by a monetary policy realized vis-a-vis the state (which of course does not mean unconditional opposition). In both cases the form of the tie may be a direct creditor-debtor relationship appearing in the form of securities (bonds and treasury notes).

The active or passive relationship that links the bank of issue to the state and its form of appearance determines in an important way the quality of the bank-of-issue attitude, that is, whether the bank of issue is able or not actively to realize its functions vis-a-vis the other economic subjects. Therefore, the conceptualization of the relation of the bank of issue to the state during the bank reorganization is extremely important, or the role it will be given during economic regulation, and how the budgetary and monetary policy will be related to each other. The quality of practice will not depend on this but on the power relations, and at least let us not renounce ahead of time the disciplinary strength that is present in the words of our intentions.

## 2. Relations with the Commercial Banks

In theory the bank of issue can have two positions vis-a-vis the bank system at the second level. Commercial banks may be independent of the bank of issue or dependent on it.

The commercial banks are "outside of the bank" in two cases:

--if by way of loan capital coming in from abroad they have adequate placement sources;

--if they can meet their money requirements in relationships among themselves (assuming that the reserve rate remains the same).

Given present domestic practice (when the currency is not convertible) we need not be very much afraid of the first case, particularly if the bank of issue has a foreign exchange monopoly. In case of an ample money supply by the commercial banks, there is no direct relation between the bank of issue and the commercial banks, but through its open market operations the bank of issue is still capable of regulating the money volume.

The relationship of the commercial bank to the bank of issue may be of two kinds, depending on administrative or monetary ties. The administrative relation is built on hierarchical dependence when the bank of issue as a superior state administrative organ controls and receives reports from the commercial bank in an official capacity. The quality of this relation is not changed if the regulation is tied to the observance of definite limits, which--*ceteris paribus*--recalls the scheme for the break-up of credit money. In order for the bank of issue to be able to draw commercial banks into its sphere of influence on the basis of financial interest, it is necessary to have the commercial note, the institution for discounting and rediscounting notes and for circulating other securities. The security must be marketable in order that its purchase and sale may actually represent the subject of its evaluation. Among other things, the condition for marketability is that it should guard and enhance real value, which makes necessary the institutionalization of monetary correction. In the background to all these things, the business interests of the commercial banks must be present. Without the above-listed factors, the bank-of-issue function that it must regulate the issuance of credit would represent no change as compared to the present system.

### 3. Relation with the Economic Sphere

Through its exchange rate policy the bank of issue is directly able to exercise an effect on enterprises with foreign trade relations, or on the population through a unified foreign exchange rate.

The development and conduct of an exchange rate policy may be classified as a bank-of-issue task, especially if it is the bank-of-issue task also to form foreign credit and foreign exchange policy. The exchange rate policy must be in harmony with credit policy, and vice versa. The carrying out of the bank-of-issue function is effective only if the effects of exchange rate policy decisions are felt by those aimed at as calling forth a volume change in the income effect of the change in the exchange rate. For this, it is necessary to have a sensitive, flexible enterprise sphere.

From wherever we start in going around the bank-of-issue function, we always come out with the realization that we cannot expect miracles from the declaration of institutionalization itself. (Even as in itself we cannot expect it from any other element in the further development of the reform.) If the elements of the economic management system are dependent on one another, then the measures taken toward the reform of the operation must also be interdependent. Every subsystem may rightly point to the other as a condition system in a manner calling for

accountability. But to keep this cluster of references with their circular pointing from becoming the ideology of immutability, every subsystem must first "sweep" before its own house. Thus the MNB must also move forward in carrying out its assumed bank-of-issue functions, and must try even now to pry open its limits.

This may mean, for example, the strengthening and making use of bank-of-issue information monopoly. Money guidance by the bank of issue must be based on market research. This research should be directed partly to the expected relations of money and capital markets, partly to the forecasting of decisions by the real capital savers. The mapping out of the rise of demand with ability to pay and the intended expenditure directions can be solved with the present national bank apparatus. The acquired structural knowledge could control and correct the more contracted data of the plan (reaction on the external and upper environment) and would represent a live relation with the banks of the second level (action-reaction on the external and lower environment).

A knowledge of market relations could create for the bank of issue the conditions for selectivity necessary within monetary guidance, a selection which would make it possible to dispense with the usual natural decision background. With the reorganization of the MNB, opportunity could be given to money management oriented to the market and this could unite--from the real aspect--the development, as it occurs, of bank-of-issue functions.

#### FOOTNOTES

1. From notices by the Hungarian Chamber of Commerce and other signs it can be gathered that the organizational building up of the banking system is a matter of indifference to the economic organizations. Enterprises are interested in the money supply. To the extent that they would like to make a two-level banking system, the goal would be to eliminate what appears to them as the recent official practice of the MNB. It is in consideration of this that they emphasize the partner relationship.
2. See, for example, Istvan Haglemayer: "The Bank System and Its Tasks," *PENZUGYI SZEMLE*, No 2, 1969.
3. In the sense that Tamas Bacskai and Eva Varkonyi write in their article "The Monetization of the Hungarian Economy," *GAZDASAG* No 2, 1983.
4. Samuleson, P. A.: *Kozgazdasagtan [Economics]*, *Kozgazdasagi es Jogi Konyvkiad*, 1976, 421 p.
5. C = consumption, I = investment, G = government expenditures

6. Samuelson, P.A.: op.c.
7. Miklos Riesz adapted to Hungarian literature the terminology of the quantitative and qualitative means of monetary guidance. This study also interprets his concept accordingly.
8. "Bureaucratic and Market Coordination," KOZGAZDASAGI SZEMLE No 9, 1983 p 1036.

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CSO: 2500/477



## OFFICIALS ANSWER QUESTIONS ADDRESSED TO ECONOMIC FORUM

Budapest NEPSZABADSAG in Hungarian 16, 19, 20, 23, 26 Jun 84

[16 Jun 84 p 8]

[Text] Great anticipation preceded the most recent television forum, dealing with the further development of economic guidance. Many letters arrived even before the broadcast and more than 1,000 put their questions to the participants by telephone. Although the program gave answers to a number of important questions connected with the development of economic guidance, they could not deal with many questions of general interest because of lack of time. In keeping with the promise made on the program these will be answered in the columns of our periodical by the participants in the forum: Ferenc Havasi, member of the Politburo of the MSZMP and secretary of the Central Committee; Laszlo Kapolyi, minister of industry; Jeno Vancsa, minister of agriculture and food; Erno Lakatos, department chief in the MSZMP Central Committee; and Frigyes Berecz, director general of the BHG (Beloianisz) signal technology enterprise.

[Question] Has a survey been made of how many people will be out on the street in the case of efficient employment? (Janos Ovari, 287-569.) Will manpower being freed in some places because of technical development and an increase in productivity be placed in their trades? (Gabor Kovacs, 659-445) Will there be unemployment? (Jozsef Weininger, Nagykanizsa.)

[Answer by Ferenc Havasi] Unemployment does not necessarily accompany more efficient, more effective management. At the same time, it is well known that today many managing organizations tie down greater personnel than is rational or necessary; they are holding on to manpower to counterbalance problems deriving from poorly scheduled production or organizational deficiencies. Thus far we have not succeeded in developing an economic environment or regulation which would bring these internal reserves to the surface in their entirety. In other areas of the economy, on the other hand, one can experience a shortage of manpower today, and sometimes this holds back the desired increase in production. A sphere of so-called shortage trades has been known for years and this sphere has not been narrowed substantially even in recent times. The placement of manpower which cannot be employed economically in certain enterprises can be ensured in these areas today and in the future.

As a result of economic development production changes, technology develops, productivity increases, new products appear and others disappear. Working people must accommodate to this, too. They must expand their expertise, possibly they must learn a new trade, because their work is needed in another place of work. So, naturally, we cannot guarantee that every worker will be kept in the job he is used to. Personnel who cannot be employed efficiently in a given place must be regrouped to developing or to-be-developed areas--partly within the enterprise, partly between enterprises. This sort of manpower movement has been going on for years---without the danger of unemployment.

In order for this transformation to take place at a faster pace guidance must create suitable conditions to aid the regrouping--if need be making people transfer--in such a way as to cause the least possible problem for the individual. In recent years we have taken steps to develop the necessary state tools and institutions (central support for retraining and regrouping, an employment mediation network providing broad information), but they have been used only in a narrow sphere. In the future the system of tools will be developed and this will offer an adequate guarantee that we will maintain full employment even with more efficient management.

[Question] To what extent does the modernization of guidance affect agricultural policy? When can we count on income regulation offering more incentive in agriculture? (Janos Felfoldi, 860-015).

[Answer by Jeno Vancsa] The practice of recent years has proven many times the correctness of the basic principles of our agricultural policy. The basic principles will not change in the course of the further development of economic guidance, but the practical application of them will adjust to changing economic conditions and requirements. In accordance with this a fundamental task will continue to be the development of the socialist large-scale system of agriculture, strengthening the socialist aspects, taking into consideration the multisectoral nature of agriculture. We will support household plots and auxiliary farms, urging that integration which has developed within the framework of large operations between small production and the large socialist farms. Material interest and moral incentive will continue to be important elements of our agricultural policy.

We will continue to strengthen the independence of the farms and factory democracy. We will maintain state support for agricultural production. Naturally, we will do this while taking into consideration the correct requirement according to which the sphere and size of the supports must be narrowed where possible. Multichannel marketing and adjustment to the market are both elements of agricultural policy which require ever greater attention from producers as a result of guidance with economic tools.

As for the second half of the question, a number of incentive interest systems function in the agricultural operations already. At the beginning of last year the farms could choose freely whether to increase their wage development as a function of the level of gross income or according to a

standard established centrally. Various forms of experimental income regulation were put into operation in 1981-1982 in 7 large farms and in an additional 92 farms in 1983 for the purpose of acquiring experience.

Despite the fact that the majority of the experiments are still only 1 year old, the results are reassuring; they do encourage more rational personnel management, the development of an internal interest system and thus an improvement in the efficiency of management. We will use the favorable experiences in the course of a further development of the income regulation system now on the agenda. We will strive to see that in the future the majority of the farms can select a form of income regulation providing more incentive than at present.

[Question] To what extent will the new form of income regulation resemble the experimental wage regulation? (Ferenc Sandor, 587-352.) What future does wage-bill management have? (Zoltan Szabo, Szazhalombatta.)

[Answer by Laszlo Kapolyi] Experiments in the area of income regulation and earnings regulation have been under way for 2 years in industry and in the other economic branches. In industry, at present, about 210,000 people work at the enterprises participating in the various experiments.

The income regulation systems we expect to introduce beginning in 1985 will make use of the results of the experiments in their chief aspects. It is a common aspect of the experiments that the decisionmaking possibility of the enterprises increases, they can weigh more flexibly how much of wages to use to carry out their tasks, compared to earlier they have more opportunity to recognize improving performance materially as well. At the same time, we will take over that element of the experimental systems according to which, in the event of stagnation or deterioration of performance, wages can be guaranteed only in proportion with the smaller performance.

In the income regulation systems expected the total tax to be paid in will depend in part on the total earnings or on the level of them; and there will be a type where the tax depends on the increase in earnings. So in this sense they will have an effect simultaneously on the total wage-bill and on the level of earnings.

[Question] To what extent will the new enterprise guidance system to be introduced in 1985 resemble the Yugoslav one? (Margit Bago, Hatvan.)

[Answer by Erno Lakatos] The essence of our economic guidance system is that we achieve the planned development of the economy primarily with indirect, economic tools, without a detailed breakdown of the national plans. This suits our conditions, or domestic relationships. In the course of our work we make use of the experiences of the Soviet Union and the socialist countries and, by the nature of the thing, we are enriching these experiences also. But we do not regard our economic guidance system and practice as a generally valid model or one which can be offered as one to follow in a broader sphere. In the same way, we do not copy other guidance systems.

In developing the new enterprise leadership forms to be introduced we intend to increase the feeling of ownership responsibility and independence of the working collective in such a way as to preserve at the same time the undivided, all-people character of state property. For this reason the planned enterprise councils and elected leaderships will differ from the Yugoslav partnership work organizations, form a system based essentially on group property, a system of self-management growing from below upward. So, when modernizing the enterprise leadership forms we did not start from the Yugoslav experiences but rather from the practice of the domestic cooperative movement, and we took into consideration the initial experiences with the director's councils in industry, endowed with collective decision-making rights, the competition system and the appointments for a definite time.

[19 Jun 84 p 6]

[Text] [Question] It is well known that the possibilities of the steel industry are deteriorating. Large investment were made in the Danube Iron Works [DV] in recent years. How will this affect Hungarian industry and the Hungarian economy? (Rezső Tibanyi, Kecskemet.)

[Answer by László Kapolyi] An LD converter was put into operation at the DV in recent years and investments on the new coking works are underway at present. The total for the two investments exceeds 15 billion forints.

Converter steel manufacture is adopting a technology with the aid of which productivity will increase several times and the modernness and economicalness of manufacture will improve significantly. A quantitative increase in production was not the exclusive goal in this investment. The coking works investment is aimed at replacing import coke.

It follows from what has been said that the DV investments did not depend on the international value judgment of the steel industry and do not do so now either in a definitive way. It is a fact that the declining prices for the sale of metallurgical products on the world market directly affects the DV also, but since about one-fifth of the products of the Iron Works are for sale on the world market the international effect will be felt in the iron foundry, or in the national economy, to at most this extent. From the viewpoint of the future the investments realized or under way at the DV can be said to have a favorable effect, which means that the sums invested will pay off from the viewpoint of the economy and the enterprise.

[Question] Will the National Petroleum and Gas Industry Trust [OKGT] and the Hungarian Electric Works Trust be disbanded? (József Bali, Győr.)

[Answer by László Kapolyi] We are not planning to break up the OKGT. Some of its enterprises, primarily background industry enterprises, may be transformed into subsidiary enterprises. The tight vertical structure of the OKGT carries out an important energy supply task, so it would not be useful to break it up now.

Breaking up the Hungarian Electric Works Trust would not be a useful step, either, so we do not plan to do it. The electric power system is a nationwide cooperating system for which central guidance is not only an organizational given but also a task deriving from physical laws. The regulation of international cooperation and the export and import of electric power can be performed in harmony with national economic interests only with regard to the electric power system as a whole. But together with all this the independence of the enterprises of the trust is increasing in all those areas of activity which are not strictly linked to the task of supplying electric power.

[Question] Can we expect a remedy for the material disadvantages of the technical intelligentsia? (Zsolt Levai, 127-962.)

[Answer by Laszlo Kapolyi] Unfortunately, the earnings of intellectuals working at the enterprises--including the technical and economic intelligentsia and those with other higher degrees--have been deteriorating constantly for a long time now, as compared to the other workers. We consider it absolutely necessary to reverse this trend. And in our present situation it is ever more important to enlist the creative spirit and talents of the intelligentsia to an increased degree in the service of improving efficiency. But at present we cannot do this with central measures in the enterprise sphere--wage policies and practices within the enterprise must be changed, the extra assets arising there must be distributed differently. Naturally, this does not mean that simply because someone has a university diploma he must get a pay increase, but it certainly is necessary that intellectuals doing their work well and effectively should receive substantially greater material and moral consideration. We are talking about a process which will take several years; one cannot correct the distortions of decades in 1 or 2 years. But we trust that by the end of the 1980's we can achieve a real improvement in the situation of the enterprise intelligentsia.

[Question] Do not the wages paid out in the economic work groups cause tension in the balance of purchasing power and the commodity base? (Zoltan Vaci, 853-493.) What future does the further development of the economic guidance system intend for the economic work groups? (Laszlo Fuzes, 884-875.)

[Answer by Laszlo Kapolyi] If the economic work groups are doing real work and their members are being paid in proportion to this work then this obviously cannot cause a disturbance in the balance of purchasing power and the commodity base, because there are real accomplishments behind the fees paid out. Naturally, if they do not follow the prescriptions someplace and abuse the possibilities provided, that is, pay without real performance, then this could cause problems. But this is also true if it happens within the framework of one's main employment at any enterprise.

It follows from this that economic guidance will continue to count on the possibilities residing in the new forms of undertakings--including the economic work groups--naturally with better organization and stricter



supervision. But we must see clearly that these forms of undertakings are only modest supplements to the main activities and cannot take over their tasks today or in the future. So our fundamental goal is to increase the efficiency of activities performed primarily in the main working time. But in the future one can also make use of the most appropriate forms of the more colorful entrepreneurial possibilities for those unique supplementary tasks, where this is justified.

[Question] How do the private artisans fit into the conception of the further development of economic guidance? (Csaba Mondí, 844-965.) To what extent does the Ministry of Industry count on the activity of the artisans? (Gyorgy Mihalovits, Szazhalombatta.)

[Answer by Laszlo Kápolvi] Artisan industry is closely connected to large industry, it aids and supplements the activity of the latter by manufacturing parts, subassemblies and accessories the large industry production of which would be too expensive. It contributes to expanding the supply of goods to the populace by producing those products the large factory manufacture of which would be uneconomical. It is an essential task of artisan industry to aid the goals aimed at maintaining the standard of living by expanding services and developing the level and quality of them. For these reasons guidance and regulation and the work of organizing the economy must create methods for the coordinated development of small undertakings and private artisans, taking into consideration the possibilities of every branch of the economy.

The effectiveness of the activity of the 57,000 artisans working in industry could also be developed if state enterprises and cooperatives would transfer to artisans their fixed assets which could not be operated economically in another way. Economic interest dictates the operation and exploitation of these assets. New forms must be developed for this (for example, leasing and other forms of rental). In this way the activity of the artisans suitable for it could be built into the work of state and cooperative industry and become a background for it working with reliable, intensive methods.

[Question] What does it mean that the forint will not "have a ribbon tied to it"? Can an enterprise decide to spend its forint where it wants to? (Ivan Kertész, 366-623.)

[Answer by Frigyes Berecz] In the peculiar language of the managers, "tying a ribbon" on something means that the receipts and expenditures of the enterprises are divided into cost groups and the manager cannot transfer his money from one account to another. The most important of these segregated cost are materials, wages, enterprise development, technical development, shares, welfare and reserve (and blocked) funds. But there are also other, smaller closed-cost groups, such as the money which can be spent on official entertainment. The strict segregation is a legacy of central guidance, which, in part, is still needed today in order to achieve higher goals. These include: , of central development programs, "holding back" purchasing power, , ing a hold on investments,

carrying out certain social policy tasks and ensuring the priority of budgetary payments.

Some of the segregated funds are not justified even today. In the future, when it will be possible to measure an increase in enterprise property and profitability which is increasing more quickly than the growth of it or is being kept constantly at a high level with a single, comprehensive index any sort of segregation will be unjustified, for if the enterprise is managing badly with any of the funds it will damage the value of the comprehensive index and automatically prompt stricter cost management. Thus it will be possible to let the enterprises managing with increased independence and responsibility decide where to spend their money. Naturally, doing away with the "ribbons" is possible only step by step, watching the requirements, and it is probable that retaining them will be justified for a long time yet in a narrower area. But even with a partial relaxation the enterprises can get much greater decisionmaking and action freedom.

[20 Jun 84 p 4]

[Text] (Question) Does not expanding the ownership rights of state managing organs hide in itself the danger that national economic interests will be forced into the background behind group interests? (Imre Szakacs, 845-881.) If the collective will be so independent is there not a danger that it will take into consideration only its short-range interests? (Gyorgy Csongor, 665-442.)

[Answer by Ferenc Havasi] With introduction of the new enterprise leadership forms we are expanding primarily the disposal rights of the enterprises connected with property--in addition to exercising employer rights over the enterprise leaders. Up to now the crucial proportion of these ownership rights were exercised by the founders, in the majority of cases by the branch ministries. Experience shows that the advantages of this practice have declined over the years. The purpose of the change is to make the operation of property, the method of disposing of property and the exercise of employer rights more efficient, while maintaining the socialist character of state property.

In the new enterprise leadership forms the comprehensive questions--for example, the sphere of activity of the enterprise, its internal organization participation in undertakings outside the enterprise, use of the incomes generated--will fall in the enterprise sphere. The central economic guidance organs can influence and supervise both directly and indirectly the exercise in practice of the decisionmaking rights transferred to the collective leading bodies of the enterprises. The founding and abolishment of enterprises and determination of the enterprise leadership form will remain in the central sphere of authority. With regard to the person of the enterprise leader, the founder exercises right of agreement. Even in the case of the new enterprise leadership forms the central organs will provide supervision with regard to legality.

Decisions which may be made in the national economic plans also apply to the enterprises operating in the new enterprise Leadership form. The execution of direct plan decisions will also be obligatory for enterprises working under the leadership of elected bodies .

Economic regulation is a many-colored array of tools for realizing the central will. By central definition of the regulators and use of regulated market mechanisms the decisions even of enterprises working in the new enterprise leadership form can be turned in the direction suiting national economic interests. If these do not prove effective, then, in the extreme case, enterprise operation suiting the national economic interest can be achieved directly, with ad hoc directives, and injury to the national economic interest could be avoided. In addition, the enterprise party organs and social organizations can aid the realization of the national economic interest with their unique tools.

Whether the collectives put realization of their long- or short-range interests in the foreground in their decisions depends primarily on the centers of interest defined by economic regulation. The effect to be expected of the planned changes in economic regulation, primarily the introduction of an income regulation system better adjusted to real performance and a system of leader interests linked to increases in enterprise property, will be that following longer-range interests in enterprise management will be strengthened. The new enterprise leadership forms may aid the unfolding of this process through the increasing collective decisionmaking possibilities. The enterprise councils and elected leaderships may strengthen the interest in preserving the common property, increasing it over the longer run, may strengthen the ownership awareness and behavior of the workers. But in addition to the regulators providing an incentive for this, elements will continue in force which pose an obstacle to an outflow of personal income not covered by adequate performance or to having the costs of inefficient work recognized in the producers' prices.

[Question] Are further wage increases for leaders in higher positions planned? (Janos Horvath, Pecs.)

[Answer by Laszlo Kapolyi] Up to the end of the 1970's the difference between the earnings of leaders and of the other workers constantly decreased, and thus the earnings of the leaders recognized less and less the necessary expertise and the importance and effectiveness of the work. For this reason, beginning with the formation of the Ministry of Industry, it was regarded as an important task to increase the material recognition of enterprise directors doing their work well. We will strive for this in the years to come, which will be aided by the new ranking system which went into effect this year. But we must reckon with the fact that after 1985 the situation will be more finely shaded, for the ministry will exercise employer rights in a narrower sphere than at present; at some of the enterprises these will be transferred gradually to the sphere of authority of the enterprise councils or enterprise collectives. If the earnings ratios of the work--it will be necessary for everybody exercising employer's

rights to take this requirement into consideration. This is also important because in the new enterprise guidance forms the independence and responsibility of the leaders will increase greatly as compared to the present, and the requirements made of them will increase. In addition, expressly or tacitly, the earnings level of the leaders will have an effect on the enterprise wage policy developed by them.

The structure of the earnings of leaders must also be modified. We are trying to increase the weight and significance of base wages within total earnings and to moderate somewhat the ratio of sliding wages. This will create a certain stability and give greater value to the leadership assignment.

[Question] A number of foodstuffs industry trusts have been abolished recently. What are your ideas about those remaining? (Janos Balogh, Trust of Milk Industry Enterprises.)

[Answer by Jeno Vancsa] Increasing the economicalness and competitiveness of agricultural and foodstuffs industry production demands the solution of many new tasks. These include a study of and improvement in the organizational and operational system of the managing units. In the course of this work, between 1980 and 1981, we abolished seven foodstuffs industry trusts--those of the sugar industry, tobacco industry, wine industry, poultry industry, canning industry, beer industry and alcohol industry. In those areas where the trust organization continues to be necessary or justified we are striving to increase the independence of the trust enterprises. In such special branches we have established director's councils which take enterprise interests into account better and can make the more important decisions on a better basis. According to the experiences of the time which has passed the organizational changes have proven advantageous. The independence and responsibility of the managing units has increased. The links between the large farms and the foodstuffs industry enterprises processing their products has strengthened. The internal operational order and democratism of the foodstuffs industry enterprises has developed.

We do not plan to abolish the three trusts now operating in our area--those for the grain industry, meat industry and milk industry--in the course of the modernization of the economic guidance system on the agenda. We do not plan to do so because the continual, secure supply of the populace with food, the centrally established prices for basic foodstuffs and, not least of all the state monopoly for foreign trade all speak for this organizational form. But all this does not mean that the modernization of guidance within a trust can be neglected anywhere. Increasing the independence of trust enterprises will continue to be a task so that within the given framework they can adapt to the needs of the market more quickly and more flexibly and put their material and intellectual resources into the service of management more efficiently.

[Question] How did domestic public opinion receive the decision about a further development of the economic guidance system, one which puts greater responsibility on the workers, too? (Jozsef Szabo, 266-162.)

[Answer by Erno Lakatos] Given the nature of the theme a part of public opinion, a not too large but influential part, watched the preparation for a further development of economic guidance.

The response to the stand taken by the Central Committee of the MSZMP was understanding and approving. But, naturally, what interests the majority of the workers and populace is primarily what effect the planned measures will have on the country, their places of work and their families. This is understandable because the changes in economic guidance, in regulation, will affect them only indirectly, affecting them directly only after the unfolding of a process. The mass media, agitation and propaganda are trying with their unique tools to help in providing basic information about the measures affecting a broad sphere of the populace, and getting them accepted.

[23 June 84 p 6]

[Text] [Question] Is a reorganization of institutions and enterprises a necessary concomitant of the further development of the economic guidance system? What sort of advantages and disadvantages will come from this? (Mihaly Onodi, 644-801.)

[Answer by Ferenc Havasi] The present organizational and institutional system of the economy was basically formed prior to the 1968 reform of economic guidance. Although it has been modified significantly in the meantime--primarily since 1979--a modernization of the institutional, organizational system of the economy remains an important task.

The goal of the comprehensive further development of economic guidance is to improve the conditions for more independent enterprise management, and as a result of this to increase the income-producing ability of the economy. The organization providing the frameworks for enterprise management must adjust to the changing circumstances, must contribute to achieving the goals mentioned. The tasks for a modernization of the institutional, enterprise organization are quite varied. They include the bringing together of various economic organizations just as much as giving independence to the larger units within one organization. In recent years the majority of the moves to modernize organization have followed the direction of decentralization. Experience has proved that independent management has substantial advantages. Among these we might mention that the effectiveness of management has improved, creative initiative has received greater scope, specific expenditures have decreased and greater opportunities have opened up for creating more substantive operating conditions for workplace democracy.

Enterprise reorganizations require basic preparation and a multilateral, detailed analysis of the conditions affecting enterprise management (market, research and development, production, personnel, etc., conditions). Where the conditions for independent management are not ensured or cannot be created in a short time a hasty reorganization could result in a decline in production, deficit operations or an increase in losses. All this can be avoided with careful, appropriate preparation of the decisions.



[Question] Is it the goal of economic guidance to end supports for deficit, weak enterprises? (Peter Racz, 112-744.) What happens if an enterprise goes bankrupt? (Jozsef Fenyo, 145-984.) Is it possible that some enterprises will be closed? (Tibor Batai, 897-902.)

[Answer by Ferenc Havasi] Increasing economic efficiency increasingly requires that guidance, on the one hand, create a more favorable situation than previously for the development of enterprises and cooperatives which are managing well and, on the other hand, encourage and force enterprises conducting uneconomical activity to improve and rationalize their management, ultimately ending activities which cannot be made economical.

We cannot undertake to maintain uneconomical activities with subsidies forever because to do this would harm the efficiency of social production. So in such cases, in general, we will leave a rationally patient time to improve the economicalness of the activities, gradually reducing or ending those subsidies which might ensure the lasting survival of this less efficient production. Indeed, we might withdraw the existing resources from areas where we do not find progress suiting the requirements and possibilities.

Those enterprises which are unable to meet the expected requirements will not receive central financial aid. An exception is those economic units which are themselves taking all necessary measures to change their situation in a reliable way. Central financial aid may be justified temporarily and as an exception in the case of the fulfillment of international obligations undertaken earlier or to avoid disturbance which might be expected in domestic supply.

Even in the past period there have been examples where, if the management of an enterprise or cooperative was not accompanied by suitable results, their financial problems increased and they could not change the situation on their own, they were terminated or liquidated. We want to make this practice more consistent in the future. One must assume the loss accompanying termination, seeing to it that the manpower and other resources being freed are used for society in areas of the economy which are working well.

[Question] Has the fate of the Office Machine Industry and Precision Engineering Enterprise been decided already? (Sandor Sajkid, Kecskemet.)

[Answer by Laszlo Kapolyi] The Economic Committee dealt with the future operations of the Office Machine Industry and Precision Engineering Enterprise on the first of June. The committee organized a further study to work out a solution favorable to the working collective and the national economy alike. But the situation of the two factories of the enterprise in Bacs-Kiskun County has been decided already because in the future they will be operated as units of the Telephone Factory (Kiskoros) and the MMG [Mechanical Measuring Instruments Factory] Automatic Works (Kecskemet).

[Question] How do you judge the possibilities connected with raising the wages of miners? (Janos Toth, Pecs.) Can we expect wages and the technical level to rise in mining? (Janos Boros, Tatabanya.)

[Answer by Laszlo Kapolyi] A number of high-level resolutions have prescribed special wage payment for miners, which society considers natural as recognition of the hard, devoted work. But in the last few years the earnings of the miners have increased more slowly than the average, which is why they were stressed. The difference between the earnings of miners and the average earnings of workers in industry has decreased. We are trying to see to it that the earnings of miners should increase at a rate identical with the average increase in earnings and to see to it that the earnings ratios improve. Nor can we give up a further increase in the technical level but at the same time, naturally, we must increase primarily the utilization of the existing very valuable machines and equipment. The essentially complete satisfaction of the needs of coal consumers was realized in recent years at the cost of great efforts by the mines and under increasingly difficult technical-economic conditions. The increased need for production, the deteriorating condition of the machines and the problems with replacing them make necessary a development of the mines. At the same time, the financial situation of the enterprises, especially of the enterprises carrying out large investments, is strained, which makes suitable development difficult. So there is a need for a study of the financial situation of the mining enterprises.

[Question] How can one imagine market competition with industrial monopolies and limited import possibilities? (Mrs Tamas Szabo, 361-010.)

[Answer by Frigyes Berecz] As for the foreign monopolies dictating to a large degree the external market competition, there is not a single branch on the world market which is ruled by a single monopoly alone. They compete with each other, too, partly in areas where the competition is not yet decided, so that "gaps" remain in the market, and partly where a large-scale organization is not capable of selling its products economically and even medium and small enterprises can find a market for themselves. Hungarian industrial enterprises also have the possibility of seeking market gaps where they may have a chance. But it is a precondition for this that, on the one hand, the enterprises take into consideration the domestic--perhaps forced--conditions and develop for the external market only those products for which a domestic background is available; in these areas they should achieve a technical level, quality and reliability which will make our products of equal rank with those of our competitors. On the other hand, the manufacturing costs of the new products plus the expected profit should not be larger than the price which can be obtained.

On the domestic market one is considered to be in a monopoly situation if he is the only manufacturer of some product. This certainly makes difficult the situation of those buying from them, since the delivery conditions are frequently adjusted to the interests of the shipper and not the purchaser. But breaking up the Hungarian "monopolies" is not sufficient to liquidate this situation. Even today there are a number of products that are manufactured here by two or more factories (for example, vegetables, furniture, shoes, clothing and many other products), and yet the consumer does not feel the favorable effect of competition. At the same time,

the competitive price system keeps a strict rein on the products of a number of exclusive manufacturers, and export interest forces technical development. If every producer has to struggle with the world market price and level requirements, then it makes virtually no difference whether they are in a monopoly situation here at home or are with a lot of others.

[26 Jun 84 p 6]

[Text] [Question] Is a modification of the obsolete tax system planned? Will it be possible for a larger percentage of the taxes paid in the settlements to remain in place for local settlement purposes? (Zoltan Hegyes, 133-186.)

[Answer by Ferenc Havasi] The tax system is a multifaceted tool for the regulation of incomes. In the comprehensive sense it includes taxation on the various incomes of state enterprises and cooperatives, various managing organizations and citizens. So to say that it is obsolete as a whole is an excessively broad generalization. At the same time, it is true that from time to time our changing economic and social circumstances make necessary a modernization or change of elements of the tax system or of the magnitudes used. At present we are also in a phase where the renovation of several elements of the tax system is on the agenda.

Increasing the independence of the councils makes it necessary to create the material conditions for this independence, too, so that they receive greater scope for economic, and management independence. In the interest of this our goal is a comprehensive regulation of the way councils generate and use material resources, and one element of this is that they should have a greater share of the incomes generated locally than they do now. In practice this means that by virtue of the tax payments of the enterprises and cooperatives working in a given settlement they will contribute in greater measure in the future to the realization of settlement development tasks. Similarly, the local councils will be able to use more of the receipts deriving from payments by the populace for the solution of their local tasks. The populace will receive greater opportunity to decide about the use of the financial tools available and to supervise execution.

[Question] One of the obstacles to rational management, and also a cause of the great growth in stockpiles, is the lack of delivery discipline. Can we expect measures in this area? (Jozsef Bojtor, Pecs.)

[Answer by Laszlo Kapolyi] Firming up delivery discipline is not a question of "disciplining" the enterprises. It depends much more on whether there is a constraint in the economy which forces the enterprises to deliver the desired quantity, quality and assortment on time. In the case of a shortage there is no such constraint; the shipper is not seeking a customer and adjusting to his needs, but rather the other way around. It is the interests of the shippers which are realized primarily in the contracts. But where the shortage disappears--as can be observed clearly in the case of soft drinks, for example--delivery readiness and discipline are palpably better than the average.

So the low level of delivery discipline derives fundamentally from shortage phenomena, which have been strengthened recently by the restricted investment assets and supply of import materials. And in many places the lack of manpower also makes difficult an increase in production. In addition, the enterprises have tried to satisfy their international obligations even better, and thus the shortages appear even more strongly on the domestic market.

What can be done against this? What is needed first of all is extra performance. In many areas increasing production runs into limitations because of the restricted material assets. Better utilization of capacity, for example, could improve this situation. It is also essential that the enterprises spend the small amount of money more rationally. There are a good many areas where capacity could be expanded with relatively little mechanization. In addition to greater interest in greater performance, there is also a need to expand market relationships and for regulation and incentive to represent a stronger constraint on the enterprises; then the delivery discipline of the enterprises would improve.

[Question] How long can the agricultural producer cooperatives continue to conduct industrial activity? (Jozsef Jaszai, Dunaujvaros.)

[Answer by Jeno Vancsa] The industrial activity of the agricultural producer cooperatives can be maintained, indeed will be maintained, as long as the economy--including industry and agriculture--and the producer cooperatives and the large industrial enterprises need it. On the basis of the receipts, the production of foodstuffs industry products represents almost half of the industrial activity of the agricultural producer cooperatives. We want to expand this with various incentives, too, because in many cases the significant reduction in transportation costs and the local use of by-products arising during processing are very advantageous for everyone.

Of the other industrial activities, it is the production of machine industry products that is mentioned most often by those who consider the industrial activity in the producer cooperatives to be excessive. In this connection it is worth noting that the large farms represent only 2 percent of domestic industry production. Most of this work is being done within the framework of contracts with industrial enterprises, within the framework of ad hoc orders or cooperation links. They are making subassemblies, parts, etc., which the large industrial enterprises cannot produce economically. Actually, this activity is background industry production in the service of the large industrial enterprises.

[Question] Will the regulation of industrial activity by producer cooperatives change this year? (Lenin Producer Cooperative, Tiszafoldvar.)

[Answer by Jeno Vancsa] As my answer to the preceding question indicated, the industrial activity of the large farms plays a useful role in our economic life. But the regulatory systems for the two great economic branches, industry and agriculture, are not the same. To even out these differences the agricultural units pay a production tax on industrial activity.



In the past 4 years the production tax doubled, increased at a greater rate than the production value. Last year, the production tax system was reviewed and measures were taken as a result of which the budgetary link of industry and of agricultural industrial activity, that is, the magnitude of the withdrawal, became almost the same. The fundamental viewpoint was that as a whole there should be no more taxes withdrawn than was justified by the development of similar budgetary contacts. By and large we adhered to this principle. But practice also shows that reality deviates from this in a few cases. In some cases the degree of taxation became excessive. The greatest tensions have been remedied already. But knowing the actual situation this year, in my judgment, we must study and review the experiences of regulation so that it will adjust in practice to the correct principles formulated.

[Question] When can we expect publication of the new regulator system?  
(Mrs Istvan Vesszos, 373-877.)

[Answer by Erno Lakatos] A number of measures and a series of regulator modifications serving a further development of the economic guidance system will go into effect in the course of next year for all enterprises or for a certain number of them. So that everyone can reckon with their effect in the course of preparing next year's plans, the necessary regulations must appear in October of this year at the latest. More than 30 regulations at various levels (laws, decrees, Council of Ministers resolutions, ministerial resolutions) are being prepared in the third quarter. The regulations will appear in MAGYAR KOZLONY, but the daily press also will give news and detailed information about them as needed. The measures coming due after 1985--i.e., the further development of the banking system, introduction of a personal income tax, a number of institutional and organizational modifications--will be regulated next year and in the years following.

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## EAST-WEST ECONOMIC RELATIONS DISCUSSED

Budapest FIGYELO in Hungarian No 24, 14 Jun 84 p 8

/Interview with Peter Knirsch, professor of West Berlin University, and Alfred Schuller, professor of Phillips Universitat in Marburg, by Miklos Breitner:  
"The Interests are Great on Both Sides"

/Text Last week the Hungarian Economics Society held a 3-day Hungarian-West German symposium with the title "Current Questions of the East-West Economic Relations." This provided the opportunity to talk with two university professors, Peter Knirsch, of West Berlin University and Alfred Schuller of the Phillips Universitat in Marburg, based on the lectures they delivered in Budapest.

/Question Professor Knirsch, in your lecture you even posed the question yourself: Is there a crisis in the East-West economic relations? What in the final analysis is your position?

/Knirsch Before I answer this, permit me to correct my own inaccuracy in the wording, as well as yours. Even though in everyday language, thus also in the newspapers, it is customary to speak about East-West relationships, that is, the relationships of the two large political blocs, we have to see that such a thing does not exist. So we are talking about direct trade between one another by countries belonging here or there, about their financial-economic cooperation. This is not hairsplitting by some professor, but because this is a relationship of differing economic systems truly intertwined with political motivations, its manifestation is realized in bilateral relations. It is also true that other factors independent of the system do at times play greater roles than the ones which depend on the system. Let's just look at the foreign trade relations between Hungary and Austria, or the two German states. How much richer and multifaceted they are than, for example, the relations between New Zealand and Iceland. At times the geographic, cultural and historical elements are stronger in this respect than the political ones.

/Question It is not my intention to "overpoliticize" this topic, but I cannot pass over in silence the fact that even though in order to further develop these relations it was necessary for Hungary to join the International Monetary Fund /IMF, many people considered this from the political viewpoint.

/Schuller/ And I in my analysis was unable to ignore the fact that back in 1944 when the IMF was set up, the Soviet Union implemented the "systemic differences," that is, the particular interests of the socialist national economy. Thus, for example, a given country can in accordance with its own interests change the exchange rate of its currency if this does not interfere with its business deals conducted with the other member countries. With this, for example, the domestic means of payment can be made independent of the foreign trade influences. Another such well-known problem is the one involving the obligation of information towards the fund. Here also we can find restrictions, such as that whereby the individual countries do not have to disclose all important data. And what is even more, the member countries are not even absolutely required to make public the fund's reports if this--to word it loosely--is an obstacle to their domestic structural transformation. But since 1944 a series of relaxations have also been enacted under so-called strict IMF conditions, about which your Ede Bako wrote as a change of profile by the IMF.

And the changes--even from the purely economic viewpoint--can be qualified as favorable to the socialist countries. Thus it is no accident that Hungary--after Vietnam and Romania--is the third CEMA country in the fund since 1982, not to mention the other seven developing countries which consider themselves socialist or socialist oriented. These 10 countries now represent 5.5 percent of the votes and have so far made use of about \$5 billion through this channel.

/Question/ And yet, when examining the other types of decisions of recent years, it can be said that the East-West economic relations have become "overpoliticized."

/Knirsch/ If we treat politics as the synthesis of interests, a very strange picture opens up before us. Because while much is being said and written in the West about the profit the socialist countries derive from these relations, which is true and cannot be denied, it is worth taking a look at the West's benefits, primarily the benefits to the companies. These are the subsidy enjoyed through export credit guaranteed by the state, and the state's free service in developing commerce by negotiating bilateral trade agreements, establishing trade offices, state subsidies for participation in exhibitions and fairs, and payment agreements.

Of course, it cannot be denied that these measures have also produced profit for the CEMA countries. Besides this, selling to the market of the CEMA countries means at the same time that the enterprises can make better use of their capacities, employment can stay at a higher level, and the enterprises can make more profit. I will not speak about protectionism here--which is valid not only for the relations between the two systems, as we also have our own "chicken wars," "steel wars," etc., with the United States--nor about the embargo, which promises no success. I would rather talk about the advantages and disadvantages to the CEMA countries.

With respect to absolute and relative advantages known from the theory of foreign trade, it is worth noting that with the purchase of technologies and licenses the socialist countries can save significant amounts of development costs, presumably more than what they pay for these to the West. It is more

difficult to put numbers on what products, producable at what cost and saleable at what prices they have to export to recover the foreign currency they paid out. That is, we have to see that--and this again would strengthen the West's advantages--the product structure of the export of the CEMA countries to the West is extremely price sensitive and if the deliveries are not made it does not create problems for the Western countries; at the most they have to find more expensive sources of supply. But recently the export structure of the Western countries has also undergone changes in this respect, the export of investment goods decreased to only 25 percent in 1981, while deliveries of basic and raw materials (including agricultural products and food) amounted to 72 percent. And beginning with the second half of the 1970's the financing problems of East-West economic relations were added to this.

/Question/ How can the act of joining or the intention to join the IMF on the part of some socialist countries ease the financing problems?

/Schuller/ Due to the demands by developing countries the IMF is looking more and more like a development bank. The fund is making more and more loans for development purposes and for the transformation of the production structures; between 1970 and 1975--even in real value--the amount of medium-range loans made for these purposes doubled, and then increased by another 60 percent by 1982. Interestingly, this growth reflects the original Keynes plans. It is true that the IMF agrees with the loan recipients on economic programs in which quantitative performance criteria and control rights are detailed. The repayment deadline can now be as high as 10 years. In 1981 alone 6 billion SDR's were in this manner made available to the member countries within the framework of 17 such agreements. In the entire decade of the 1970's only 13 billion SDR's were loaned for such purposes. If we look at this growth tendency from Hungary's viewpoint we can see that the economic policy the country has adopted and judged correct is in harmony with the IMF's "expectations." These are: decreased demand in the society as a whole, credit restriction, increased interest rates, increasing export and moderating import by substitution, strongly regulated wage policy, decreasing the budgetary expenses, creation of a surplus in the current balance of payments by the end of 1983 by decreasing the amount of outstanding foreign loans. Shall I go on? You know more about this....

/Question/ To return to the original question: Is there a crisis then in East-West trade?

/Knirsch/ Looking at the events of recent years, we cannot be optimistic. Nowadays it can even be considered a success if the degree of interdependence reached so far by the two economic and political spheres is maintained. The encouraging thing is that the interests are great on both sides in maintaining these relations.

## BUDGETARY PROBLEMS DISCUSSED

Budapest FIGYELO in Hungarian No 29, 19 Jul 84 p 3

[Article by Istvan Hagelmayer, member of the Economic Working Group of the MSZMP Central Committee: "Budgetary Dilemmas"]

[Text] As a result of the relatively high proportion of withdrawn enterprise profit receipts, budget redistribution is also high. Budget revenues in Hungary exceed 50 percent of the gross domestic production. Incomes at the disposal of the enterprises are low, and the profits include a high proportion of subsidy. Characteristically, withdrawn profit receipts have been fluctuating between 70 and 80 percent since 1968, while subsidies hovered around 35 percent of the net incomes (but approached 50 percent between 1974 and 1978 and then gradually stabilized at 35 percent). This originates from the significance of redistribution. Thus there is nothing to wonder at in the statement that the income remaining at the enterprise is "too little for living, too much for dying."

The size and proportion of withdrawal can be justified only if problems greater than those existing now emerge in its absence. Considering the expenditures as well, the question of whether or not the ratio of redistribution is too high cannot be given an unequivocal answer.

### Social Burdens

Among the proposals for changes that affect the economic sphere, the demand for decreasing subsidies is always the first item, and this is a constant governmental problem, for a solution is still lacking. Subsidies temporarily "cover up" or hide low efficiency and thus do not force higher production profitability. In this view, the ratio of redistribution within the economic sphere is high.

I think it is a proper objective to decrease subsidies, but it is difficult to implement; this should not entail, however, the rejection of the proposal. Unprofitable production should be replaced by imports. However, the limits of imports are well known. Thus the possibilities for sensible decisions are limited. Incidentally, employment is based on the given production structure; in it, every change (including the necessary and rational changes) entails



a change in the life of individuals and social groups. This may cause conflicts. It is thus a difficult task to base the enterprise's employment policy only on the requirement of efficiency, leaving the maintenance of total employment to the state. I still believe that increased efficiency, also resulting from decreased subsidies, is the interest of society, affecting the entire society, not only individual groups.

What should be done? Where it is possible, continued subsidy should be converted into a one-time developmental subsidy. This would become even more significant if the distributive mechanism of the subsidies were changed. These are characterized by an open distribution, conflicts of interests, and democracy that guarantees harmony. More precisely, redistribution that is often too complex and is based on personal connections and on position should be eliminated.

The so-called "depreciative regulation" also belongs here. This makes it possible at a relatively low level of state management to grant various favors which, by definition, are not included among the subsidies, although their economic effect can hardly be called "something else." This, too, is a redistribution of the net national revenues, which is, however, not included in the budget. The proliferation of the "depreciative regulation" entails another danger, namely, decreasing subsidies may be replaced by state paternalism. In principle, the construction makes it possible to solve smaller problems rapidly. I will not disagree that this is sometimes justified. I think, nevertheless, that the degree, the objective, and the expected result need exact regulation and social control.

Thus I think that redistribution is high in the economic sphere and that its decrease (and a change in the mechanism of distribution) is justified.

#### At No Cost and at Full Price

Redistribution in the human sphere (health, education, culture, and social security) regularly has exceeded the increase of national revenues and revenues of the state budget in the last decade. If this type of redistribution [illegible] is rather limited by the economy [illegible] then it is justified to decrease it. But in almost every part of the sphere mentioned, there is a significant lag, and even more money would be insufficient. In addition to moral views, the economic ones must also be considered. (He who takes more time to get well will go back to work later, and he who does not get an adequate training and cultural education in school will be hardly qualified to meet requirements dictated by a developing technology!) The working man will feel low if the education of his children is a real burden relative to his income or if he sees a future in which his pension (which is lower than his income) gradually loses its value. The concerns are thus distressing and critical indeed. This is why it is justified, even necessary, to compare demands with possibilities and to work out solutions which help (or at least do not hinder) the realization of the goals of societal and social policies. This is why it must be made clear whether enough of the available revenues are appropriated for the attainment of the given goals (and, if not, at the expense of what they can be increased), how the distributive mechanism works in the given area, and whether the various interests have adequate representation and real social control.



It is no less important to decide which of the demands classified as social (financed by the community) can be considered all-important and in which ones a partial and differentiated repayment (possibly in relationship to revenues, i.e., considering social aspects as well) or a full repayment of costs can be justified. The question also emerges of whether it would be beneficial to handle certain expenditures within or without the budget (e.g., in social security) where it is possible to note the source of revenue and where the revenues are "adequate."

I agree with those who maintain that short-range fiscal interest, i.e., whatever is "easy on the budget," cannot dominate, but I also add that we are, by necessity, facing the limitations of the budget in even-paced economic growth and the method of distribution.

#### Pressure of Inflation

In the age of the "slow recognition," i.e., between 1973 and 1978, domestic use constantly exceeded the national revenues produced. The state budget was also overspending, accumulating deficits. We debated on the causes and on the effect of this deficit on the social and economic processes, and were looking for ways to decrease it.

Most participants in the debate (even if not always saying so openly) blamed a significant change in the circumstances as well as the economic policy, declared to be unchangeable, while others thought that the causes are to be found in the flaws of financing.

It was consequential for the budget that exports exceeded imports. The difference between the two shows that domestic consumption is in excess of what is being produced. But how much larger the increase in the forint-revenues of the economic units will be! This will no doubt result in inflationary pressure unless the accumulation (saving) of money by all who have revenues corresponds with the total sum of credit and interest payments, which is, under favorable conditions, identical with the export balance. We must strive, therefore, for an increase in the willingness to save.

Understandably, we can hardly expect an increase in private savings, and we can hardly expect an accumulation of enterprise money--partly as a natural reaction to recurring withdrawals that are difficult to calculate. There is thus no other solution than the accumulation of money by the state budget, i.e., credit balance. Many people may consider this as nonsensical in view of the many problems of society that require a lot of money. There are few alternatives: we either alleviate the problems using the budget's surplus revenues (this will increase the rate of inflation) or the problems remain alongside with controlled inflation and credit balance.

#### Defenseless Enterprise

Even a rough picture of the relationship between the situation in foreign trade and the budget shows that the budget plays a significant part in the fluctuation of the total demand, i.e., it affects the money's buying power. The income regulation linked to this; the most frequent criticism

against it is that it is changed too often, it is unpredicable with regard to its scales and methods of solution, and it is so complicated that even experts find it difficult to understand.

The enterprise sector, the payments of which add up to 85 percent of the budget's revenues, can be exploited by the state management, and does not have an adequate representation in the organs of state power. The decisions regarding the regulations are made before the ratification of the annual budget, their listing means information for the national assembly; as an institution, it does not learn about the changes occurring during the year. On the other hand, it is a constantly recurring phenomenon in the state management that the question of what measures must be taken is raised after the evaluation of the first quarter. And in Hungary, changes of regulations play an outstanding role in measures taken.

Generally, the appearance of two related arguments is frequent before the changes: our prognoses were not well founded enough (the fluctuation of exports is unfavorable, foreign prices are less favorable than expected, the internal buying power "runs away," etc.) and thus the unchanged regulations do not guarantee the implementation of the plan. In Hungary, a deviation from the plan entails the natural reaction of correcting the regulations. It is difficult indeed to make perfect plans (our dreams are still to be found in parts of them) and, because of the enterprises' insensitivity toward expenditures, we failed to stop the price hikes; thus there is room again for operative interference and for a change in the regulations. The circle remains open, going around in a spiral.

#### Increasing Uncertainty

A recurring key point of the regulation is the limitation of accumulation as well as the limitation of wage and earning payments. None of these are goals by themselves but both serve the attainment of domestic consumption that is lower than the international revenues produced by seeing that what is not used domestically can be exported. But the result is doubtful, even from various viewpoints. Although the withdrawal or limitations on the use of part of the enterprise accumulation fund (resulting from profits already taxed) may create the desired enterprise accumulation, the price is increased uncertainty. The enterprise attributes this to the abrupt actions of state management, and not to the new circumstances in the economy or the market. The macrolevel regulation of wage increases can also serve part of public demand well, but here the price is the loss of the wages' function of encouraging better work.

The development fund is corrected afterward, possibly because the factors showing the way (price, profit) are not adequately affected by the market; on the other hand, wages and processes are regulated beforehand, possibly because there are no possibilities for subsequent corrections here, with the exception of price increases.

In Hungary (and this statement may be considered consciously exaggerated) the regulation of business activity takes place unilaterally in the "column of revenues," without paying much attention to the fact that the budget, with its entire column of expenses, makes goods available and increases enterprise profits, i.e., affects the market processes. It should be decided whether a decrease of budget expenses or further modifications of the budget's internal structure would yield a better, or at least an adequate, solution to the problems discussed above.

9414

CSO: 2500/495

BUDAPEST POLLUTION EXPLAINED, DETAILED

Budapest MAGYAR HIRLAP in Hungarian 24 Jul 84 p 5

[Article by Laszlo Pajor Gyulai: "The Heavy Air of the Capital"]

[Text] Many people equate cities which polluted air, in many cases with good reason, especially in the case of industrial cities and most of all Budapest. As far as the pollution of the capital is concerned, it is important to note that nearly 40 percent of the fixed air pollution sources of the country and one-third of all motor vehicles operate there and, as we know, transit traffic is also heavy.

"Please come to Helsinki Road in Pesterzsébet. The air stinks so bad that you cannot stand it."

The telephone receiver clicked, and the unknown caller hung up. He did not say why the air stank on Helsinki Road. Investigating the site a few days later, many people guessed the source, one of the plants of the First Chemical Industries Cooperative; in our opinion, that is the source of unpleasant odors.

As a matter of fact, the cooperative has been regularly paying air pollution fines for years. But it is not alone. In district 20 there are 66 small and large plants operating, and 11 of them pollute the air above the legal limit. As far as the amount of the fine is concerned. Industria is about average.

Within the Protection Zone

"The council requested an air pollution reduction implementation plan from us 6 years ago," says Szilard Szabo, president of the cooperative. "At the time, we discontinued the production of some of our products, but even this turned out to be insufficient. According to the regulation, we must take into account that pollution may be caused by some technological faults. Finally, by 1981 we gave up the production of nine products, which resulted in 70 million forints annual loss."

"Would it not have been cheaper to pay the fine?"

"The council has the right to ban the manufacture of any product overnight and this can cause a much greater loss."

The construction of new plant in Budapest is only possible if it satisfies the requirements of environmental protection. But the majority of the factories in the capital began operating decades ago when requirements were different. These factories must pay for air protection belatedly, and this--as is the case with Industria--costs a great deal of money. Environmental protection investments are not profitable for companies; this is why the National Environmental Protection and Wildlife Bureau and Capital Council financially assist them. In Budapest, air pollution fines collected amount to 8-10 million forints; nearly half of this is invested in environmental protection.

According to the officials, most of the enterprises are partners in the implementation of environmental protection tasks. But opportunities are often limited. The majority of air purification devices must be imported, for hard foreign currency. People who live near the plants, however, could not care less. The only important consideration for them is to keep their living environment free of smoke and odors. They demand the relocation of the factories. But, strange as it may sound, in most cases factories cannot help it that they must operate near populated areas. Once upon a time they were built outside city limits, where they were not bothering anybody. Since then, however, housing projects have surrounded them, where dwellings are frequently located closer to the factory than authorized. The National Building Code establishes the protection distance, but if it is less expensive to build within the zone, the implementers of the housing projects disregard the regulations, and this is felt by the noses and lungs of the tenants later.

The capital district plants are not the only ones responsible for air pollution in Budapest. This is also proven by the fact that most of the sulfur dioxide is found near Moskva Square, and carbon dioxide near East Railroad Station.

"The introduction of gas heat improved the air of the capital a great deal, but the role of the old sooty coal heaters was replaced by traffic," says Bela Donath, department head of the OKTH.

"Recently, together with the Ministry of Transportation, we worked out a program to reduce the carbon dioxide exhaust of gasoline motor vehicles and the soot exhaust of diesel vehicles."

All of this sounds simple. But currently the prerequisites of radical changes are not present. It would be preferable if newer, four-stroke engine cars would be used in the capital. In contrast, the cars in use are old and there are many two-stroke vehicles, which heavily pollute the air.

The construction of the southern branch of the M0 beltway would be a great help, because transit traffic could bypass Budapest. This would not only relieve the capital from the exhaust of many trucks and trailers, but the flow of downtown traffic would become continuous and faster, and the number of traffic jams could be reduced. Finally, one of the goals is to use, if possible, less-polluting fuels.



## Long-Range Plans

This February, the Budapest City Construction Design Enterprise worked out its long-range environmental protection plan. It deals in detail with the tasks of the various industrial sites, but this study, too, names traffic as the primary source of air pollution and offers the environmental protection modernization of vehicles to be placed in operation as the exclusive solution of the problem. Without this, "we must face and increase in air pollution from traffic."

The concluding passage on air quality of the plan is good to reflect on. "We must be prepared for possible and temporary air pollution levels which pose an immediate danger. Like other large cities with developed industries and heavy vehicle traffic, Budapest, too, must have at its disposal a multi-level warning plan."

Quantity of air pollution materials based on 1980 and 1981 data;  
(thousands of tons/year)

<u>Designation</u>	<u>Carbon dioxide</u>	<u>Nitrogen dioxide</u>	<u>Carbon Monoxide</u>	<u>Lead</u>	<u>Particulate</u>
Population	27.0	2.9	30.0		27.0
Industry	35.7	7.7	37.0		16.0
Traffic	--	15.1	166.5	0.3	3.3
Total	62.7	25.7	233.5		43.3

9901

CSO: 2500/513

## HUNGARIAN-CHINESE TRADE DESCRIBED

Budapest HETI VILAGGAZDASAG in Hungarian No 27, 7 Jul 84 pp 39-40

[Article by Eva Kortvelyes: "Hungarian-Chinese Foreign Trade--Breaking Down Walls"]

[Text] The revived economic diplomacy between Hungary and the PRC is preparing ground for the development of commodity trade, which has fallen to a low level. The visit by Peter Veress, Hungarian minister of foreign trade, to Beijing last year was returned last week by his Chinese colleague.

Following a wave trough in commercial relations, Madame Chen Muhua, the PRC minister of foreign trade, met in Budapest last week with Peter Veress. PRC-Hungarian commodity trade declined significantly between 1979 and 1981, but last year the planned trade exceeded the 1982 level by 86 percent, and this year it is expected that a further 50-percent increase will be recorded in the statistical offices of the two countries. With these clearing-account reciprocal deliveries, trade between Hungary and the PRC this year will exceed 270 million francs (Hungarian-PRC trade is accounted for in Swiss francs).

Hungary delivers to the PRC primarily fertilizers, mining machinery, black-and-white television equipment and sets which are assembled in the PRC, medical instruments, rolled goods, pharmaceuticals, and machinery for the manufacture of automobile headlights. The PRC delivers to Hungary commodities of about the same value, chiefly consumer items: well known in Hungarian stores are Chinese textiles, cotton knits and ready-made goods, porcelain, toys, various kinds of foods--for example, mushrooms, mandarin and pineapple canned goods--and, of course, tea.

Two documents signed during the recent discussions in Budapest established the base for a more dynamic expansion of cooperation. One of these documents is the Hungarian--PRC economic and technical cooperation agreement, and the other is the protocol on the establishment of a Hungarian-PRC economic, commercial, and technical-scientific collaboration committee.

In recent years the PRC commercial gate has opened wider not only for Hungary but also for other East European socialist countries. But despite the rapid increase in trade, the capitalist countries still play the major role in Chinese foreign trade. According to the PRC statistical yearbook published

in English last year, China's total foreign trade in 1982 amounted to 77.2 billion yuan; 4.2 billion yuan was with the Democratic People's Republic of Korea, Romania, the GDR, the USSR and Cuba, while its trade with Japan came to 16.4 billion yuan, with Hong Kong 12.2 billion yuan, and with the United States 11.4 billion yuan. Regarding the future of trade with socialist and capitalist trade with China is always changing. We maintain that on the basis of the principles of mutual advantage and equality we will gladly expand our trade relations with the East European countries, including Hungary."

Although the dimensions of the Hungarian economy are dwarfed by China, there are a number of areas where Hungarian enterprises can participate in the modernization of the Chinese economy. For example, discussions are under way regarding the purchase by the PRC of Hungarian bus chassis on which the Chinese would build their own coaches. Also, there were discussions about the reconstruction of Chinese bus factories and bread factories with Hungarian participation.

Despite the above-mentioned differences in size, Madame Chen Muhua said that it is also possible that the PRC could use not only Hungarian production but also its economic management experiences. "We are glad to study your experiences and to learn from you."

With a population of 1 billion, the PRC is the most populated state in the world. It succeeded by 1978 in reducing its rate of population growth to 1.5 percent, down from 2.3 percent in the early 1970's, but this is far below the less-than-1-percent birth rate considered necessary for the implementation of the long-term economic policy. Formerly, Madame Chen Muhua was the chairperson of the committee dealing with the position of women and the protection of families. Thus, an economist-politician who is also very experienced in population policy matters visited Budapest. In this regard she said this much in the final minutes of the short time allotted for statements: "Birth control is the basic question of Chinese domestic policy. This work is of very great importance from the aspect of economic development, the raising of living standards, and the health affairs of society."

6691

CSO: 2500/499

## RESULTS OF ECONOMIC REFORM IN STATE FARMS ANALYZED

Warsaw WIES WSPOLCZESNA in Polish No 2, Feb 84 pp 72-81

[Article by Zofia Kasprzyk and Leszek Wisniewski: "Reform in the State Agricultural Enterprises—Two Years Later"]

[Text] In October 1983 the Institute of Agricultural Economics and Food Industry undertook its second study of the consequences of economic reform in State Agricultural Enterprises.\* The study included 67 state farms which together cultivate 417,000 hectares of agricultural land, i.e., more than 12 percent of the total acreage of state farms administered by the Ministry of Agriculture and Food Economy. They were selected according to the number, acreage, and location in individual macro-regions. The sample can therefore be regarded as representative. Like the previous study, this project also consisted of interviews with the directors of state farms, and often included the participation of the entire managerial staff. It dealt with the following topics: changes in the structure and profitability of production; utilization of basic factors of production; changes in the organization and management, and the assessment of the economic-financial system of the state farm enterprises; external conditions of functioning of the enterprises.

## Changes in the Structure and Profitability of Production

To a significant degree state farm enterprises varied in the way they have taken advantage of their opportunity for a free choice of the most effective composition of produced output. As in the previous study, three types of causes were involved: considerable stability of the economic structure of agricultural enterprises (capital structure, employment, physical conditions); insufficient information about the available supplies of industrial means of production under controlled distribution; considerable volatility of conditions that determine profitability (frequent changes of prices for products and investment outlays). Despite these limitations state farms usually took advantage of the possibilities to change the structure of production provided by the reform. Trends in the fiscal year 1982/83 were similar to the preceding year, as demonstrated by the clear increase in the proportion of papilionaceae grains and industrial crops, mainly rapeseed, in the total structure of plantings, as well as by the restriction of animal feeds (especially corn), a decrease in cattle raising (especially young grazing cattle), an unchanged level (with a slight upward trend) of pigs, and growth in sheep production.

\* The first study was conducted in April 1982; see L. Wisniewski and Z. Kasprzyk: "State Farms in the First Stage of the Implementation of Economic Reform," WIES WSPOLCZESNA No 9, September 1982.

These changes attest to the strengthening of the process of adaptation of the quantity and structure of production to the changed conditions of profitability and the differing soil and climatic conditions, as well as the possibilities for individual enterprises to secure their own animal feeds. This was confirmed by the directors' assessment of the profitability of various products. The most profitable were rapeseed, cereals, sugar beets, milk, pigs and sheep, as well as potatoes grown for processing in the distilleries owned by the state farms. Cattle raising, especially the production of beef for the domestic market, was regarded as least profitable.

However, the fact that a relatively large number of enterprises—one-third—regarded the production of milk and pigs as not very profitable points to considerable differentiation of the conditions of production. One should take into account that the lack of profitability was emphasized above all in large industrial farms which do not have a sufficient animal feed base, the high cost of production was a consequence of high amortization costs and the necessity to pay high prices for feed. In half of the farms the fundamental reasons for low profitability were seen in too-low prices and the price structure. This was often aggravated by nonfunctional and expensive buildings for livestock, small individual productivity of the animals, high costs of feed production, and lack of personnel willing to work with animals.

Views concerning the profitability of production were significantly influenced by the price changes implemented in July 1983. Almost 60 percent of those interviewed judged these changes negatively and believed that they had set inappropriate price relations between crops and animal products, as well as prices for products sold by the agricultural sector as compared with prices for the means of production and services purchased by it; many negative views concerned prices of individual products. A frequently expressed view held that crop prices were too high in contrast to livestock, especially cattle, on the domestic market. Positive opinions about current prices were expressed by 40 percent of the directors. Many among them stressed that the price structure was generally correct and thought that favoring cereal production and industrial crops was justified in the current situation. Views concerning the differentiation of cereal prices were not unanimous: the differentiation of cereal prices was regarded as incorrect by enterprises working on poor soil which, out of necessity, grow rye and oats.

Therefore, the range of opinion on the current price system is very wide. The preponderance of negative views was determined first of all by the disadvantaged situation of farms engaged in livestock production which lacked sufficient feed base, because the necessity to buy feeds led to the worsening of profitability. However, in many cases the directors, although they talked about unprofitability, maintain their herds at current levels in expectation that prices for animal products, especially meat, will increase in connection with the difficult situation in the country.

Such varied, sometimes even contradictory comments point to great differences in the conditions of production. This should lead to changes in the structure and scope of production in individual enterprises: to the limiting of less profitable branches of production in favor of those that are more profitable. However, a very simplified current analysis of profitability does not provide sufficient basis for making such decisions. Half of the directors, when asked whether



the presently functioning system of information makes it possible to predict the consequences of economic decisions correctly, were critical and stated that the current system of financial and material reporting may perhaps satisfy the needs of the Main Bureau of Statistics but is of little use to state farms. Some managers thought that well-functioning internal reporting should make it possible to make simple calculations of the costs of production.

The analysis of individual responses leads to the conclusion that the need to enhance the present system of information is perceived mostly by profitable enterprises, while those that achieve worse results do not feel the need for such an enhancement and regard the existing system as correct.

The changing conditions of profitability of production and, consequently, the economic situation of State Agricultural Enterprises,\* complicate decisions concerning both the changes in the structure of production and investment outlays which determine the future development of enterprises. Judging the decisions of the last 2 years, one can generally say that changes in the structure of production which occurred in 1982/83 were, by and large, in agreement with the needs of rational management; they provide positive evidence that the instruments of economic policy used to stimulate production in state farms have been effective.

#### Utilization of Basic Factors of Production

Employment. The trend toward decreasing employment, which appeared in 1981/82 and was due mainly to early retirements, was halted in 1982/83. Nevertheless, over 50 percent of enterprises included in the study experience shortages of labor in livestock production, especially cattle; 20 percent have labor shortages in crop production. The directors emphasized difficulties involved in transferring workers to other departments, especially to work with animals (despite high wages there); shortages are caused not only by the lack of people willing to change jobs, but also by the shortage of housing. In this situation over half of the enterprises does not envision improvement in the structure of their workforce in the near future.

In 1982/83 almost 55 percent of state farms included in the study experienced an increase in labor productivity, which was primarily due to better organizational practices, improvement in work discipline and, in particular, wage increases. Almost half of the farms found that changes in the economic-financial system reinforced motivation for good work. Main factors responsible for improvement include extension of autonomy of decisionmaking, opportunity for a more free structuring of wages, piece-work, and higher bonuses.

However, it is troublesome that in over 40 percent of the units studied there was no change in the increase in labor productivity. In some cases this was a consequence of stoppages caused by lack of spare parts or supplies, and by lower

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\* Financial results of the state farms analyzed in this study were 6,470 zlotys per hectare in 1981/82 and 6,580 zlotys in 1982/83 (preliminary figures), and the indicator of profitability, computed as a ratio of revenues to all expenditures, was 109 percent and 106 percent, respectively.

quality of animal feeds, but in general it was due primarily to low worker motivation and worsening of discipline, especially in money-losing enterprises. The management in these enterprises stated that the present economic-financial system lacks the stimuli which would encourage greater productivity. It was repeatedly stressed that there is no clear connection between the quantity and quality of work and the level of compensation, in addition to a faulty system of managerial compensation and, above all, faulty principles of bonus rewards. It was thought that the current practice of annual bonus payments is incorrect and it was proposed that managers and workers employed in livestock production be given quarterly bonuses, and employees engaged in crop production or production services be paid bonuses on a monthly basis. It was proposed that the basis for computing bonuses should encompass production results, achievement of specifically set concrete tasks and, in general, quality of work (timeliness, taking proper care of equipment, quality of production). It was proposed that management should be given bonuses for the economic results of the enterprise (plan fulfillment and improvement of economic results).

Views about the proper size of bonuses differed; almost 60 percent of the directors said that a bonus ought not to exceed 30 percent of basic pay, but more than 30 percent suggested that bonuses should be between 30 and 60 percent of basic pay.

**Agricultural lands.** In the first year of economic reform state farms significantly decreased the acreage of cultivated land (by 2.6 percent). The farms studied in 1982/83 decreased acreage by a further 0.8 percent. Changes planned for 1983/84 demonstrate that this trend is clearly coming to an end. However, in no case did the enterprises plan to increase cultivated acreage, mainly because of the lack of possibilities of buying or taking over additional land, even though 10 percent of the directors believe that more land would improve agricultural results.

The decrease in cultivated area was a fundamental reason for the greater intensity of land use. Almost 80 percent of the directors confirmed that this increase took place in connection with the transfer of overly fragmented land to the State Land Fund; usually it involved plots of low agricultural utility or plots situated far away from state farm headquarters; 90 percent of the farms made special efforts to increase soil fertility, mainly through better organic fertilization, agrotechnical improvements, wider cultivation of soil-building vegetation, recultivation of soil and land reclamation; 50 percent increased the area of lime-treated soil.

**Production capital.** In the nearest future one of the most difficult tasks for the state farms will be to increase the utilization of production capital. Autonomous decisions concerning the scope and structure of production have often led to a decrease in the utilization of durable capital, especially buildings for livestock on the farms raising young cattle. However, in the second year of the reform there are already many attempts to improve this situation: unused or partly used buildings are being adapted for storage or facilities for raising other animal species (sheep, poultry), or sometimes for workshops.

The situation is much easier with regard to farming and transport machines: in 1982/83 many well-used tractors, gasoline-powered vehicles, and some special purpose machines were either sold or withdrawn.

A troublesome phenomenon, also emphasized in the previous questionnaire, concerns the lack of sufficiently strong motivation to manage durable equipment in a frugal manner. Almost half of the directors have pointed this out. In their view causes include shortages of spare parts, excessive cost of repairs, and shortages of skilled labor. Some enterprises, which regard the present economic-financial system as a sufficiently strong reason for efficient management of durable equipment, believe that the internal bonus system encourages it; others (over 40 percent) stress that such moves are being made more difficult by the impossibility of making purchases and by the lack of financial means for investment. However, in all but one enterprise a bothersome shortage of durable equipment is being felt; the greatest need exists in housing construction. Often the reason for shortages of vacant apartments of appropriate quality which would help to attenuate labor shortages is that over 20 percent of the apartments owned by the enterprises are occupied by retired workers, and about 6 percent by nonemployees. The worsening of the housing situation is most often caused by economic-financial regulations which place the responsibility for investment on provincial administrations and thus stop the flow of financing for housing construction in state farms. Large needs also exist in the area of magazines, storage buildings, drying and mixing houses, auxiliary buildings, etc.

Almost all enterprises feel a painful shortage of machines, especially for harvesting green forage, and high-power tractors, sowing machines, fertilizer distributors, equipment for picking root crops, as well as complete technological processing assemblies for crop production.

#### Changes in the Organization and Management and an Assessment of the Functioning of the Economic-Financial System of Enterprises

After the period of partial changes in the organization of state farm enterprises which were put in effect in the second half of 1981 (many units, mainly agricultural combines, had been dissolved), in 1982 there was a relative stabilization. This does not mean that this process is entirely finished because in about 20 percent of the enterprises in the study further changes are foreseen for 1983/84. They will go in various directions: in 10 percent merging of divisions is planned, in another 10 percent, especially agricultural ones, divisions will be split further. The primary reasons for this include the necessity of adapting organizations to the existing natural conditions (acreage and distribution of fields), infrastructure, location of buildings, and the existing stock of production capital.

Among the enterprises in the study the differentiation in the scope of autonomy of the basic production divisions is relatively wide. In general there was growth of autonomy in almost half of the enterprises in the study. In 1982/83 the scope of managerial decisionmaking included relatively many problems, but in comparison with the previous year it has become more homogenous. Decisions concerned mainly the coordination of investment and repairs, organization of supply of means of production, external contacts, production cooperation within the enterprise, coordination of production plans, control and consulting. In a few cases enterprise management exercised all management functions in the subordinate divisions, but in 70 percent divisional components of the enterprise



made production decisions for themselves; however, there were opinions that divisions have frequently been reluctant to make decisions on their own, fearing the risks involved. However, divisional autonomy of production does not signify an absence of planning coordination within the enterprise. Over 70 percent of enterprises develop annual production plans in consultation with the management and only a few enterprises have extended full freedom to their divisions.

Financial relations among divisions are usually based on official or contractual prices; some enterprises use only contractual prices, usually based on calculation of profitability, set jointly by workers' councils, division managers and special price commissions. Prices usually concern products processed in the divisions of agricultural industry, animals for further fattening, and bulk feeds; less often cereals. Almost 45 percent of the directors see the need for cooperation in production, not just within their own enterprises but also with other state farms, cooperatives and private farmers, especially in livestock production for further fattening, and growing of feeds and products for food processing.

Managements of enterprises and divisions not only plan and organize production but also have influence over technological modifications. Recently a change of technology in livestock production, primarily feeding technology, was necessary in connection with the worsening of the situation in the supply of the means of agricultural production, mainly animal feeds. In over one-third of the enterprises traditional ways of pig feeding were reintroduced, limiting cereal grazing; in a small number of cases changes in cattle feeding also took place—cattle is taken out to graze more often and the proportion of bulk feeds in feed rations have been increased; single-feed diet was abandoned and agricultural side products are more fully utilized. Moreover, the organization of livestock production was changed by using a closed production cycle to a greater degree than in previous years. The reason for this lay in the greater difficulty of cooperating with private farmers and among divisions (enterprises), which had been caused by changes in conditions of profitability and, consequently, a new system of account settlement.

In crop production technology changes have been less frequent; they usually concern individual phases of the production process, e.g., harvesting of sugar beets, fertilization, or storing of agricultural products. They are directly connected with the lack of machines and equipment which would make it possible to modernize entire technological processes.

In 1982/83 processes of planning and management were also influenced by the reactivation of workers' self-government, although—in the opinion of the directors—they function correctly only in half of the enterprises. Of course, a full assessment of their activity is difficult because the period of their existence has been too short. In more than 40 percent of the responses the need for self-government was emphasized; on the other hand, it is difficult to describe precisely the functions and the ways of carrying out the principles of self-government. In general, the dominant view holds that participation of employees in enterprise management is needed, although over 10 percent of the directors thought that "state farm society is not yet ready for self-government," and many believed that "state farm employees desire good management more than their own participation in the management process." It was thought that the principal

role in decisionmaking should belong to the director (over 60 percent of responses), or to the director and self-government together (25 percent). Only one person expressed the view that prerogatives of self-government are too narrow, while 60 percent think they are sufficient, and almost 40 percent regard them as too large because of the legal responsibility connected with the right to make decisions. It was stressed that proper selection of personnel--conscious, skilled specialists who have prestige among the workers and know the rules and problems of state farms--is a basic condition for correct functioning of workers' self-government. It is therefore necessary both to educate members of the self-government and to have an efficient system of information about production and economic problems of the enterprise.

It is known that effective functioning of enterprises depends to a large extent on the stability of rules and regulations concerning the fundamental administrative and legal principles of management. Thus almost one-half of the enterprises postulated a necessity to limit frequency of changes in such regulations, despite their frequently emphasized flaws. The largest number of reservations concerned the principles of evaluation of enterprises. Seventy-five percent of the directors believe that profit should not be the sole criterion and that productivity of capital as well as the magnitude and structure of production should also be taken into account. The directors claimed that the existing regulations, especially the bad wage system, a faulty system of profit distribution which frequently acts against the interests of the work force, and lack of funds for bonuses for efficient work, are not strong enough to motivate improvement in effectiveness. It is commonly believed that existing regulations do not take into account different conditions in which state farms must function, namely natural and economic conditions and available supplies of durable assets and labor.

The assessment of new tax principles is very diverse. Responses show that they have not been sufficiently well explained to the management, indicating that the scope of social consultations had been limited. Seventeen percent of the respondents had no opinion about principles of taxation while 55 percent were critical, judging that they did not sufficiently take into account differences in soil and climatic conditions and thus imposed excessively high taxes on special divisions. In general, it was said that proposed taxes were too low for the "rich" enterprises and too high for the "poor" ones, and that they are less advantageous to state farms than private farmers because they do not take into account additional burdens caused by State Land Fund [PFAZ] payments, income tax, welfare payments, etc.

Respondents proposed that in addition to the quality of cultivated land (soil and climatic conditions, distribution of land, and topography), production capital and available labor also be included in the assessment criteria of conditions of the enterprise. Almost 40 percent of directors favored subsidies to improve the economic situation of units in difficult conditions; more than 30 percent wanted special tax relief; 25 percent supported extending easy loans to buy means of production; 30 percent thought that enterprises in most difficult conditions need help to increase their production capital or to obtain housing for their employees; they also need to be assured that they will be able to provide appropriate compensation to their employees.



The difficulties of securing the means to finance production and investment, especially among weak enterprises, create a need to look for new solutions. One possible way would be to create a special fund for mutual aid to make low-interest or no-interest loans to units experiencing temporary financial difficulties. Over 50 percent of the respondents thought that this was a good idea and believed that it should be set up centrally, with the National Associations of State Farms having a voice in disbursing such loans. Opponents said that such a fund would contradict principles of the reform since credit functions should be performed by the banks; solutions to problems of enterprises in difficult situations should be system-wide instead of taking the form of temporary financial aid. Some directors thought that bad management could be subsidized through this device and stated that, in order to improve management effectiveness, other measures should be taken, but they failed to specify what they should be.

#### External Conditions of the Functioning of Enterprises

A basic factor determining efficient production process involves the supply of necessary means of production, namely the level of supply and timely information about its size and composition. Only 15 percent of the enterprises noted some improvement in 1982/83, especially in the supply of mineral fertilizer and insecticides; the supply of spare parts, miscellaneous small equipment, fuel, tires, animal feeds (especially as concentrates of appropriate quality), and construction materials got worse. It was again emphasized that industrial production is not in line with the needs of agricultural production. It was also stressed that "aid" to agriculture too often has an exclusively declarative character, as it is offered on conditions which preclude taking it because of very high prices for spare parts, machines and small equipment. At present the system of supplying state farms with means of production differs greatly among individual provinces; enterprises usually strive to acquire means of production on their own. The bad supply situation causes frequent "intersector" conflicts provoked by the controlled distribution of scarce means. A solution to this problem is seen by some in the return to a centrally handled distribution that would, in their view, ensure a more "just" result.

An important factor determining the kind of contacts between state farms and their environment involves activities of units engaged in production and investment services for state farms. In the directors' view, these units function badly (50 percent of responses) and had gotten worse (15 percent); improvement was rarely perceived. The most frequent complaints concerned the imposition of conditions and prices, the absence of guaranteed delivery of services, their low quality, excessive profits and lack of professional ethics. Particularly criticized were milk cooperatives (dishonest claims about the quality of milk), state agricultural machine stations [POM] and the State Agricultural Bank (orientation toward more profitable activities outside agriculture), Meat Centers (breaking the deadlines for deliveries), Seed Centers (limitation of contracts), and state grain elevators (troubles with accepting grain deliveries). It is generally believed that units which have a monopoly in their relation with state farms incorporate their own disorder and inefficiency into the price of their services, forcing enterprises to become self-sufficient, especially in the area of repair work; this phenomenon exists in 90 percent of the enterprises.

The Bank for Food Management has a special impact on the activity of enterprises because it determines the course of production processes and, through the financing of investments, plays a fundamental role in their future development. The functioning of the bank was favorably judged by almost 50 percent of the directors (65 percent in 1982), and unfavorably by 30 percent (25 percent in 1982). The most frequent complaints included lack of flexibility, lack of familiarity with the specifics of the enterprises, and a widespread "bad attitude" toward state farms. It was stated that the bank is too rigid in its interpretation of regulations, although not necessarily to the disadvantage of enterprises, thus contributing to the deepening of their financial difficulties. There were general complaints about interest rates and lack of their differentiation in accordance with the conditions of the enterprise. In the opinion of many directors credit limits are too low and make the moves to adjust to the conditions of the reform more difficult. It is understandable that complaints concerning activities of the bank were more frequent in enterprises with poorer production and economic results.

The assessment of the functioning of agricultural departments of provincial offices, i.e., bodies which create state farms, varied: one-third thought it was good, almost one-third deemed it bad (troublesome), and in more than one-third of cases the relationship between provincial offices and the enterprises was regarded as a loose one, involving only control and transmission of administrative orders. Many directors stated that their autonomy is limited by these offices in various ways, and that they interfere in basic issues involving not only distribution of profits and creation of funds but also the organizational structure of enterprises, production plans, directions of distribution of agricultural products, etc. It was also stressed that bureaucrats who deal with socialized agriculture are not familiar with the peculiarities of state farms. In the directors' view, the concern of provincial offices is too often demonstrated by an excessive number of all types of control audits rather than an expression of interest and providing help.

Contacts between gmina offices and the management of enterprises were much better. However, more than half of the respondents stated that they do not maintain such contacts, or that their contacts have a purely administrative character.

The liquidation of territorial state farm unions in 1981 abolished the intermediary link in the structure of state farm administration; some of their functions were taken over by territorial state farm associations. Following a year and a half of their existence, it is possible to make a tentative assessment: in the opinion of 55 percent of the directors their functioning was good or satisfactory, over 40 percent had a negative view; in almost 30 percent of enterprises it was thought that associations are superfluous; there were particular criticisms concerning the duplication of the provincial office functions, the narrowing of their role exclusively to transmitting information, attempts to make the functions of associations resemble territorial unions, thus creating job openings for their former employees. Positive views of associations concerned primarily their educational and advisory functions, facilitation of contacts with other enterprises and institutions, help in securing supplies of the means of production, actions connected with the implementation of economic analysis to make production decisions, and help in drafting long-term plans. The National Association of State Farms has been generally well regarded, since it is seen as the only institution which defends the interests of state farms on the national level.

## KEY OBSTACLES TO ECONOMIC GROWTH ANALYZED

Warsaw PRZEGLAD TECHNICZNY in Polish Nos 24-27, 10, 17, 24 Jun, 1 Jul 84

[Article by Andrzej Kakiet: "Barriers to Development"]

[10 Jun 84 pp 16-17]

[Excerpts] This article presents what the author sees as the most important barriers which determine the operating conditions for Poland's national economy and whose overcoming will be of crucial importance for the future of this country.

These are the barriers of technological change, raw materials and energy, transport, and water. Their sources, lying in faulty processes set in motion in the past, are well described in a rich literature, and as such will not be discussed here. The key problem will be to depict these barriers and show their weight.

The impact of these barriers have been felt for some time now, but presently, in this author's opinion, its intensity is dangerously growing, posing before the central planner more and more complex problems and choices with less and less degrees of freedom.

A question arises of how the notion of barrier is understood here and why these particular barriers are considered the weightiest.

A macro barrier (and only such are discussed in this article) is understood as a factor of major importance for the course of economic processes, one whose impact cannot be ignored without the danger of these processes collapsing on the national scale. Such a factor may constitute either a durable constraint or a durable stimulator of economic development, which largely depends on the manner in which the economy reacts to its emergence.

In this situation, the application of previously-used measures and mechanisms proves deceptive, and yields effects out of proportion to the expanded inputs. This is because the economy enters the sphere of diminishing marginal returns, which simply means suffocation and cumulative process of collapse. This becomes understandable when one realizes that the major factor behind the emergence of a barrier are precisely these measures and instruments. And conversely, consistent actions, marked by tenacity of purpose, result in accelerated economic development and often impart to it a new dimension.

From this point of view, the emergence of a barrier is both an inescapable and a positive phenomenon. Speaking figuratively, the barrier constitutes a sort of flexible wall which either may stop us or which we will manage to overcome (which often requires that new technologies be used, that proper choices be made, and that a hierarchy of goals be set). But we must not fail to notice this wall and stubbornly follow the previous path. The wall's resistance will only increase then.

Naturally, there are much more such barriers in our conditions, only to mention those in foreign trade (in its broadest sense) or in economic efficiency. But these barriers are making themselves felt at various planes.

Again resorting to an example, if we assume that the process of development is a dynamic course of events shaped by many factors constituting an "edifice of influencing factors," then the purely physical barriers will provide the basic foundation of this "edifice."

Thus, this article leaves out political considerations, problems of motivation, etc.

### The Barrier of Technological Change

This author considers technological change the main factor of economic development and the major determinant of its pace. Technological change is understood here as the elaboration and application of new technologies resulting in steady improvement in the quality of products, coupled with simultaneous increase of parameters and reliability, and decline in the content of energy and raw materials, or, generally, in costs.

In each process of production, losses come as an inescapable element. The role of technological change is to minimize them. In other words, this is a qualitative, rather than quantitative growth.

As seen from this angle, the current situation of the Polish economy is bad, and in some of its sectors alarming. This is all the more dangerous as the latter include such strategic areas of strategic importance for the supply of the economy as the metallurgical, chemical or construction industries.

There is a severe shortage in Poland--both in terms of quantity and, particularly, product mixes--of quality and alloy steels and of processed metallurgical products. The situation is additionally worsened by the wrong structure of the steel industry, with its continued emphasis on common and low-processed steel and negligence of stainless, heat- and acid-resistant steels, precision shapes, pipes, cold-rolled sheets, and heat-treated products--which is precisely the opposite of international trends.

The structural backwardness of our metallurgical sector is magnified by the state of its production facilities. Only eight rolling mills are less than 10-years-old, while 47 ones exceed the 20 years mark, generally considered the threshold of modernity. There are only two electric steelworks capable of reaching a European ratio of final product to crude steel, but for the shortage of powerful



electrodes their equipment (transformers) cannot be fully utilized, and the average furnace-heat time stands at 5 hours (against slightly more than 1 hour in Japan). The share of alloy steels in total steel output in this country is estimated at 2.5-3.5 times lower compared to highly industrialized nations, and the share of spheroidal iron in the production of castings is three times lower. Add to this the very modest application of light alloys and sophisticated technologies such as sinters. The application of aluminum and its alloys is lowest in Poland among all industrialized countries in the world, and the per capita sinters consumption is three times lower than in the United States.

In the chemical industry, the level of mechanization and automation is differentiated—from the relatively high degree in oil-refining, petrochemicals, fertilizers and so-called heavy synthesis, to the very low degree in dyestuffs, paints, varnishes, and light synthesis, including the very important pharmaceuticals segment. Special mention is due to the very limited availability of supplies of chemical origin for other sectors—all this in a situation where the role of the chemical industry in a modern economy is steadily on the increase.

The state of the construction sector is best described by the six basic indicators, considered the most important throughout the world:

--heat penetration through external walls is twice as high in Poland as it is in Western Europe;

--heat penetration through windows is 30-40 percent higher, on average;

--unit consumption of fuel (in terms of ton coal equivalent) per 1 kg of burnt cement-clinker is nearly twice as high;

--the amount of dwelling resources per 1,000 population is nearly twice as low;

--the number of newly-built dwelling per 1,000 population is nearly twice as low;

--labor intensity of construction is 2-3 times higher.

This is a telling evidence of the level of our construction industry, which is additionally lowered by the quality of building services and the chronic scarcity of adequate heat-insulation and ceramic materials, wall elements, claddings, paints, joinery, etc. Small wonder then that the Polish economy, not having adequate raw and intermediate materials at the early stage of processing, is not capable of making final products of at least European level, and that it cannot catch up with the steady technological change in the world, which has greatly accelerated of late. This is all the more dangerous as the world is at the threshold of a new technological revolution, especially as far as the new materials are concerned. If this prospect materializes, we will be faced with one only alternative. Either we will manage to modernize the economy in a comparable time and in a similar manner or we will have to buy new technologies. Most probably, the problem will have a mixed solution, but still there will remain a question of what these technologies will be paid with.



This shows the importance of Poland's highly-processed exports which should feature high technical and use-value parameters (unless we cherish the illusion that raw-material exports will do, of which more later).

Meanwhile, our processing industry loses 20 percent of its machine-tool capacity for lack of easily-cut steel grades, while at the same time raising the consumption of high-speed steels by more than 15 percent. Transport vehicles are 25 percent weightier (per payload unit) compared to those made in advanced countries. The share of chipless machines in the total (metalworking) machine-tool output is two to three times lower than in other countries (including, for example, Czechoslovakia). Even in such a relatively well developed area as mining, with mechanization at the world level, the equipment made of the available steel grades is very heavy and unreliable. In the meantime, the world is escaping from steel into new types of materials.

Electronics, or the branch of industry which is crucial for its technological level, is very poorly developed. And it is not even the sophistication of equipment (e.g., computers) that counts most but rather the spread of electric achievement throughout the economy. Suffice it to say that the application of semiconductors in Polish industry is more than 30 times lower than in the United States and some 20 times lower than in Western Europe.

The situation is also very bad when it comes to the automation of production processes. It is intensely developed in highly industrialized nations, especially in respect to arduous and dangerous jobs (in the chemical, power, and metallurgical industries), in-plant transport, but also to discontinuous processes in the manufacturing, where numerically-controlled equipment is being increasingly applied. In Poland, only one-fifth of eligible processes are covered by automation and robotization.

At the same time, processing degradation of R&D establishment (and industrial institutes in particular) can be seen. In this area, reform seems not to function at all. Specialists are dropping out, and--paradoxically--enterprises do not use the technological progress funds in full.

All this is happening in conditions of growing disinvestment and technology gap. Still worse, from the purely selfish standpoint of an enterprise, this trend is understandable. But on a macro scale, it is impermissible that the future be overshadowed by the present. Characteristically, those exporting enterprises which make profit and are willing to continue selling abroad spend the technological progress funds eagerly, knowing that only in this way they can stay in foreign markets.

So such "rule of the game" should be devised which will promote technological progress as a profitable means of ensuring production growth. And these rules should be stable, at least in their underlying principles. This, however, is just a beginning.

What the Polish economy needs are applications, and their only criterion should be the economic effect. (Incidentally, the financing problem should be resolved here. Applications are 10 to 12 times more costly than the research itself, and one can hardly expect enterprises to manage on their own.) In this

context, two major lines of action are needed. The first one, in the production-supply and raw-material field (metallurgy, chemicals, construction, and to some extent agriculture) would be to obtain high-grade materials. This is closely connected with a drive towards economies, and mention should be made here of very strong interconnection of technological change with the next barrier--that of raw materials and energy. The other line of action would be targeted on industries which, on the basis of high-grade materials, might provide in future a source of highly-processed exports. Among such industries, I see machine tools (especially those for chipless treatment), automation equipment, hydraulic and pneumatic devices, etc.

Despite a great deal of discussion on the subject, a full analysis making possible the selection of Poland's "export specialties" (other than coal) has yet to be made. I agree with the opinion that the expansion of highly-processed exports requires that production-supply imports be increased, which in turn can be achieved on the basis of raw material sales. This, however, should absolutely be a temporary arrangement.

Technological progress, however, is costly, and the effects of related spending take some time to show, as a result of which its importance is not always understood. This is particularly true in the present situation, which is yet another reason why we cannot afford random selection of priority, industries, based on the elbowing power of their representatives. The problem is deepened by the lack of simulation analyses which should precede any strategic decision. Currently, it would be very difficult in practice to provide numerical evidence that, in a given period of time, it is more profitable to change boilers in power stations than to build a new coal mine, and it would be virtually impossible to solve this problem with ecological considerations taken into account.

So let us not delude that we will manage to avoid buying ready-made elements or technologies. This, however, should be guided by a clear-cut concept. Either we will buy components of a quality unavailable in Poland and make from them sophisticated final products (on the basis of Polish know-how), or, in case of purchasing production lines for the manufacture of final products, we will provide sufficient R&D potential (even if this required imports) making possible steady modernization in the future. This, for example, will probably be the case with microelectronics--as I view chances for internal solution in this field with skepticism, especially given the need of widespread use--but the related measures must be well prepared and carried out with consistency and intelligence.

Access to information and technological achievements in advanced countries is a matter of absolute necessity. Autarky in this field would probably have the most damaging consequences in the long term.

[17 Jun 84 pp 14-15]

[Excerpts] The Barrier of Energy and Raw Materials

From the angle of energy balances, the countries of the world can be roughly divided into three groups:

- (1) Huge net exporters of energy. This is a small group of primarily oil-rich countries.
- (2) The most numerous group of countries with a slight surplus (with wrong structure), and, most often, deficit in the energy balance--forced to import energy. The extent of this export is either constant or it fluctuates in a pretty wide range.
- (3) Durable importers of energy, having no energy sources of their own.

For us, the most important are developments in the second group which includes Poland and virtually all highly industrialized countries of the world.

These countries are faced with two options. Either to expand manufacturing industries and agriculture in an intensive manner, maximize the so-generated relatively expensive exports, buy relatively cheap energy from as many buyers as possible, develop so-called new sources of energy (for the time being, it is only the nuclear energy that counts), and lay emphasis on conservation of material resources, or to obstinately develop their own, usually conventional, energy/raw material facilities, with relatively steady imports [of energy]. The latter option is both extensive [as opposed to intensive] and myopic, as it leads to very high costs (as a result of more and more difficult access to energy and raw-material resources), and because the burden of imports proves unbearable in the long term. And past experience shows that, appearances notwithstanding, this option does not foster energy economies.

The new applied mining methods, especially of coal, bring us closer to the depletion of deposit. Only half of mineable coal deposits ["zasoby bilansowe," or "that part of geological deposits that, at the present level of technology, can be mined to the benefit of the national economy"] is extracted. The rest remains underground. And, in another breakdown, a half of the mineable coal deposits are at depths close to 1,500 meters and in seams with thickness of 1.5 meters and less. Mechanization of these seams has yet to be mastered, while seams in the 1.5-3 m thickness range are being depleted at a quick pace.

From the angle of geological deposits, the situation is still worse. The extraction of 1 ton of coal is accompanied by the loss of 4 tons of geological deposits. The energy content in mining operations is high, and it rises in step with growth in output. Another jump in costs is caused by the necessity of "going down" (below 1,000 meters) with extraction.

That coal remains our major export item is no cause for jubilation. It should be remembered that the increasing curve of mining costs and the falling curve of the obtained transaction prices [international prices expressed in zloty at the official rate of exchange] are getting closer to each other, and at some time will cross.

Wasteful management is also the order of the day for our second largest energy carrier, lignite. Only a small fraction is briquetted, and chemical conversion is entirely forgotten--all this in a situation where most of probable and proven lignite deposits are eligible for gasification and hydrogenation.

There is a similar situation with other basic raw materials--copper (poorly developed deep processing and recycling), zinc and lead (losses from the currently applied preparation and smelting technologies reach 15 percent), and sulfur (the dominant drilling method results in 50 percent losses, is highly energy-intensive, and pollutes the environment).

All authors discussing Poland's future energy demand point to the necessary growth in oil imports and processing. This is certainly an important problem, but it should be borne in mind that the discussed figures are much higher than the present processing capacity of domestic oil refineries. This means the necessity of building new huge petrochemical plants. Nuclear energy has been given a go-ahead only recently, and the start-up delays are now being compounded by construction delays.

All this warrants only one conclusion. Poland has been following a path of extensive pattern of development, choosing a very bad option from among those facing the second-group countries (as classed at the beginning of this article). I realize that this is a result of many conditions and constraints (tradition included) whose impact is hardly weakening, but it must not be ignored that the world is taking an opposite direction.

Meanwhile, Poland's situation can be described as follows:

--With the given level of indigenous resources, the existing mining methods bring us inescapably to the moment of depletion (although, naturally, the situation varies from one raw material to another).

--It is not reasonable to expect any major increase in deliveries from socialist countries, and most certainly this import will not become cheaper. The Soviet Union, or virtually our only supplier in this group of countries, has to reach for harder-to-get, that is costlier, Siberian deposits.

--There remains the Third World. But a full satisfaction of the requirements of the economy through increased purchases from this direction seems debatable, if only because of the lack of funds.

The impact of the energy/raw material barrier (which turns out to be strongly interconnected with that of technological change) is now seen in full light. In this situation, the way out seems to be as follows:

--Coal output should be stabilized at the maximum level of 200-215 million tons a year, with a tendency towards reducing it in the future. Coal will remain our major energy-carrying raw material (which is right), but its utilization should be absolutely rationalized (which also applies to the worrying tendency towards making it our major export item).



--A strategic program of economies, to be based on the expected technological progress, should be worked out with a view to reducing the energy content in final production and to qualitatively changing the structure of production. Still more important, such a program should be consistently implemented. It should be realized that such measures are costly, but there seems to be no alternative to them.

--Nuclear and hydropower generation should be expanded as intensely as possible.

--Salvage of recycled production should be accorded due importance. At present, the use of this source is drastically low--in a situation where aluminium recovered from scrap requires 60 percent less energy than aluminium obtained from bauxites, and where the corresponding savings in the case of lead reach 90 percent.

--The alternative sources of energy must not be neglected. This is a field where few countries passed the "toddling" stage so--paradoxical as it may seem--our delays are relatively lowest. But materials of special properties and quality are needed here (which again points to the importance of technological change).

The situation is different when it comes to rock minerals. They abound in Poland, but the problem is that they are insufficiently utilized. For virtually all major rock minerals, the domestic resources will suffice not only to fully meet the domestic demand but also to provide the export stuff. This offers very good conditions for the reorientation of our raw-material policy, the more so as an overwhelming majority of these raw materials can be mined by strip methods.

On the basis of these resources, the glassware and ceramics industry should be expanded (and its products exported), and major changes should be made in the pattern and quantities of the produced building materials. Production of fine aggregates, small-size ceramic items, and binders should be expanded and the delays in the construction of enrichment plants should be eliminated. Because of the latter problem, Poland has to import gypsum, choke, ground dolomite, ceramic clays and other minerals which are aplenty in this country. This situation is anything but normal, the more so as it is the field of local industries and local initiatives. The opportunities offered by the great abundance of rock minerals in Poland should be tapped in full, and the so-called "white mining" might become one of the national economy's specialties (also as far as exports are concerned).

[24 Jun 84 pp 18-19]

[Excerpts] The Transport Barrier

The well-known and obvious truth that producing goods is not enough, that they have also to be carried to users, and that most of final goods could not be produced at all without the transport of materials and components seems to be neglected in Poland. The main goal of the transport system--to meet the haulage requirements of the national economy--has for a long time been met with growing difficulties.



With the increasing incapacity of the transport system, mainly as a result of the negligence of this sector, the transport barrier will be the soonest to hit the economy. There are many indications that this is inescapable.

The factors behind the unreliability of the transport system include:

- the pattern of the country's structural and spacial development, virtually ignoring the transport factor;

- the absolutely insufficient allocation of resources for development to the transport sector (compared to the tasks set before the sector);

- The uncontrolled growth of the economy's transport requirements--both in the sphere of production and distribution;

- the small interest on the part of economic units (especially those with a high level of transport requirements) in rationalizing the demand for transport services.

In the rail segment, or the backbone of our transport system, the emphasis was laid in the 1970s on the purchase of rolling stock--which was producing the quickest results. But in consequence, the structure of fixed assets (e.g., the rolling stock vs. the railroads) began to hamper growth in carrying potential. Delays in railroad repairs are in excess of 6,000 km of inter-station roads and 3,000 km of station roads. Irrespective of supply limitations, this is caused by the very poor saturation with equipment, as expressed by the 4.5 H.P./km coefficient, which is lowest in Europe (usually its level is 2-4 times higher).

Along with the poor state of safety equipment, this results in a substantial deterioration of operating conditions. Trains have to move at reduced speeds and through roundabout routes. The number of accidents is on the increase. The state of communications is very bad, especially when it comes to automating the marshalling stations. A separate chapter is the great incapacity of repair facilities, which renders quick and high-quality repairs impossible. And recently, a new danger emerged in the form of limitations in the deliveries of new rolling stock, which--when coupled with the necessary scrapping of worn-out stock--results in a progressive decline of carrying capacity.

From the standpoint of goods freights, the passenger traffic is a nuisance. Passengers should be carried regularly, at high speeds (long-distance traffic) and on separated roads (in large urban centers). None of these conditions is actually met. Separated sections are only in Warsaw and the Gdansk-Gdynia region, and because of the shortage of locomotives and the state of railroads it is not possible to develop speeds of 160-200 km/h (which in industrialized nations was achieved some 20 years ago).

The negative impact of these factors is further deepened by the organization of freight traffic, which is marked by:

- wide dispersal of transshipment operations;

- idle movement (with no cargo) of an overwhelming portion of freight cars;

- large number of marshalling stations;

—low level of traffic concentration;

—great delays in introducing new transport technologies, especially those related to containers and combined transport by rail and by road (which is connected with the absence of specialist equipment at both the PKP state rail company and its customers).

In the road transport segment, there is a severe shortage of delivery vans, trucks with 3.5-5 ton payloads, and special-purpose medium-payload vehicles with interchangeable bodies. The platforms of general-purpose trucks now in use are too small, as a result of which their payload capacity cannot be used in full for most kinds of cargo. Our backwardness is reflected in the parameters of the available and the currently-produced vehicles. Fuel consumption is much higher than in similar classes of Western-made trucks, and the payload-to-weight ratio stands at 0.5 (against 0.7-0.8 in most European makes).

The state of roads is very bad. Only 37 percent of them are adjusted to weights greater than 10 tons per axis. And the share of heavy-duty vehicles in traffic road has been growing since the early 1970s (road endurance was entirely ignored when import purchases were being made). Because of the constant shortage of equipment and materials—e.g., the consumption of asphalt per 1 sq km of the country's territory stood in 1985 at 2.8 tons in Poland, against 5 tons in France, 7.8 tons in the GDR, and more than 19 tons in West Germany, and is still worse at present—road overhauls could not be made at a required scope. Delays are now estimated at 44 percent of the combined length of local roads and 38 percent of the length of state roads.

The very limited extent of inland navigation reflects the state of waterways development and, consequently, the unfavorable hydro-navigation conditions. Of great importance is also the insufficient number of river ports and factory wharfs, to say nothing of their as a rule poor equipment. Because of the short navigation season and the shortage of reservoirs (which would smooth out water-level amplitudes), the deliveries by inland water transport are very unreliable. Only 70 percent of waterway have guaranteed depths, and lighting can be applied in only 28 percent of them.

The conclusions from this summary review are very disquieting, the more so when one remembers that the transport potential should exceed the requirements of the economy by some 12-15 percent (e.g., PKP should have a reserve of 16,000-18,000 freight cars) if it is to be a stimulator rather than a limiting factor.

Railroad and road transport will remain in Polish conditions the principal carriers of goods, but they could well be relieved by the expansion of inland water transport (the Vistula and Odra waterways), and, to a lesser degree, pipe networks.

The railroad transport should service bulk cargo shipments over long distances. It should be provided with mechanized, concentrated and automated technologies, and the major lines of action should be aimed at:

—the greatest possible expansion of unit-train traffic, which requires that high-capacity freight cars be provided and that centralized facilities for cargo reception be built;

—the optimization of cargo haulage in single freight cars or in small groups of cars; this requires in particular that marshalling stations be automated and that cargo-dispatch points be concentrated (in nearly 80 percent of stations, introduction of efficient goods handling equipment is rendered impossible by low workloads);

—an absolutely necessary improvement of the state of railroad infrastructure, and especially of the so-called basic network (some 12,000 km of major lines); this requires that the pace of electrification be accelerated (so as to electrify this network by 1992, at the latest) and that the technical state of railroads be improved—by making up for repair delays, by applying heavy-duty types (S-60) of railroads on all heavily used lines, and by automating the station and inter-station traffic (each electrified line should be protected by a two-direction automatic blockade);

—smooth functioning of service and repair establishments, which requires that the potential of the ZNTK rolling-stock repair company be radically expanded.

In the short run, the deliveries of freight cars to PKP should be increased—at least to a level which would offset the scrapping of worn-out stock.

The road transport should mainly service non-bulk cargo shipments, on a door-to-door basis, at short distances, and whenever delivery dates have to be strictly observed. Together with the rail segment, it should provide the backbone of our transport system—and contacts between these two segments should be based on cooperation rather than competition.

More than 35 percent of rail cargoes now need to be carried at some section by trucks, and this share will grow in step with the unavoidable concentration of rail cargo-dispatch points. This is particularly true of cargo shipments between large-scale dispatchers and dispersed receivers (or vice versa). Major lines of action should be focused on:

--developing standardized specializations and technologies, which requires that adequate rolling stock be provided and that loading and disloading facilities be properly equipped;

--breaking with the existing practice of producing trucks which do not meet the requirements and expectations of the transport system; special attention should be devoted to efficiency-related parameters (engines, payloads);

--concentrating the haulage services in the hands of one carrier (forwarder), starting from the cargo-dispatch point; this should be accompanied by competition among individual carriers, and the customer's ability to freely choose from among them;

--making up for road repair delays and increasing the endurance of the whole basic network to at least 10 tons per axis; all newly-built state roads should have the parameters of dual-carriage way, and selected ones the parameters of expressways.

The inland water transport should constitute an integral part of the overall transport system, and to a large extent should be interchangeable with PKP (in specified product groups). It is a paradox that, having two natural waterways which, in addition, flow in the same directions as the major flows of goods traffic, we make so little use of them. The expansion of this segment, however, depends on investment projects developing and modernizing the waterways--and this is a constraint which this writer fully understands. In this context, mention should be made of a strong interconnection of this problem with the barrier of water resources, discussed later in the article.

There is still one more problem that should be tackled if we want the transport system not to get choked up. This is the problem of transport content of the Polish economy, as measured by the amount of transport work per unit of national income produced. On average, it stands at a level four times higher than in industrialized nations of Western Europe, comparable with Poland in terms of territory, and more than 50 percent higher than in socialist countries (excluding the USSR). A major factor behind this is the high share of mining, construction, agriculture, and other transport-intensive sectors, but the comparison with other socialist countries, whose economies and management methods are similar to ours, speaks for itself.

The problem of transport content is often mistakenly identified with that of rationalization of transport operations. While not playing down the importance of the latter, it may be noted that it is aimed at eliminating irregularities caused by erroneous decisions which in nearly all cases result from the current state of affairs. The effects of such measures are small and short-lived, as targeted at the consequences rather than causes of high transport content. These measures must be broadened to cover the environment of the transport system and to rationalize the demand for transport services. Only then will it be possible to get at the sources of high transport content. After all, the transport system, as a provider of services to the rest of the economy, is supposed to accept for haulage any product over any distance. But this should be done for a decent fee (which should not be taken to mean that the problem will be solved by the otherwise necessary increase in transport tariffs). If economically unwarranted transport operations are to be reduced and eliminated, conscious long-term measures and structural/systemic changes are needed.

[1 Jul 84 p 23]

[Excerpts] The Water Barrier

The state of natural environment in Poland is very bad, and, still worse, its degradation shows a tendency to grow. The ecological limit of environmental resistance has been approached throughout all the country, and in some regions it has already been crossed. In such regions, the impact of natural



conditions is dangerous to human health, there exist constant ecological disequilibria in basic ecosystems, and opportunities for further economic development are very limited. In case this state of affairs spreads over a large portion of the country's territory, a situation may emerge where [we] will have to choose between the health of society and economic development.

Of all constituent elements of the country's natural environment, the worst situation is in the field of water resources and their management.

According to UN data, Poland comes very low on the European list (20th position and lower, depending on a year) as far as the per capita level of water resources is concerned. The objective difficulties, caused in large measure by the location of Poland at the border of climatic zones, are aggravated by the disordered and wasteful management of surface and underground waters, which is magnified by the general ignorance of the value of water (with the exception of regions where it is already in short supply).

This leads directly to a danger of total depletion of national reserve of disposable water. The problem of quantitative barrier looks still more gravely in individual regions, both as regards surface and underground waters (especially in central and southern Poland, where in so-called dry years water for municipal and industrial purposes is in dramatically short supply). As long as this is a local problem it can be neutralized (even if at great expense), but when it covers a larger area of Poland it will get out of control.

While the quantitative shortage on the macro scale seems to be a problem of the future (although this is a very near future), the qualitative shortage is already felt at almost entire territory of the country, and is becoming an increasingly serious problem. Suffice it to present the current state of water purity in Poland: just 1 percent of the overall river length in the first class of purity, 19 percent in the second class, 31 percent in the third class, and as much as 49 percent outside any classification.

Among 500 large lakes in Poland, some 300 are being, or have already been, downgraded as a result of pollution by various kinds of sewage. The share of properly treated sewage in the total amount of discharged sewage stands in this country at a mere 15 percent, against more than 70 percent in West European countries. It is the most resourceful water areas that are most polluted, which--when coupled with only token fines for contamination--destroys the process of self-purification of water resources. The problem is aggravated by the purely quantitative approach to it and negligence of its qualitative aspect.

This state of affairs necessitates quick and comprehensive reaction. As already proposed by experts, water resources in major drainage areas should be managed on the national scale in an integrated manner, taking into account both quantitative and qualitative aspects. In such areas, three principles would have to be absolutely observed:

--water purity at the outflow from the area must be (at least) at a level enabling self-purification;



—biological flow must remain intact throughout the year;

—so-called alimentary transfers of water from other drainage areas are impermissible as long as own disposable resources are not exhausted.

Next to this, I am of the opinion that:

—a system of fees, fines and rebates should be introduced with a view to differentiating the price of water among individual regions and to imparting to water the functions of a "raw material"; fines for the discharge of poorly treated sewage, or not treated at all, should be much higher than the costs of treatment;

—disposability of surface resources should be increased by the completion of the already started retention reservoirs and by the construction of new ones, especially in the Vistula basin (the ratio of the capacity of man-made water reservoirs to average yearly outflow stands in Poland at 3 percent, against 12 percent in Czechoslovakia and 15 percent in Bulgaria);

—effective anti-flood protection should be provided for economically-important, fertile regions, such as the Vistula mouth of the vicinity of Plock;

—the state and number of water treatment plants and other hydro-facilities should be radically improved, mostly through local initiatives.

#### Conclusion

The manner in which the barriers presented in this article are to be overcome will be, in the author's opinion, of crucial importance for the future, and will actually shape this future. It is my deep conviction that the major barrier will be that of technological change, to be strongly interconnected with the barrier of raw materials and energy, and that the crunch will come first with the transport and water barriers.

The technological progress must be oriented at two major directions—a radical improvement in the quality of "input" to processing industries (coupled with a broad program of reducing the high energy, material, and transport content in production), and the attainment of world standards in industries chosen as foreign exchange earners. With some simplification, what we need are locomotives for economic growth. We must not content ourselves with mediocrity, under the motto of "shortage of funds," because it easily grades into backwardness.

A question arises of what should be done to prevent these barriers from making themselves fully felt. The goal of this article is mainly descriptive, and the author does not attempt to give ready-made, comprehensive remedies (for lack of sufficient data and analyses), although some directions have been outlined here. It is not the author's intention to "cry for investments." True, the proposed measures will prove costly, but the goal is that the modest amount of disposable resources be used in the best possible way. We will not avoid growing disinvestment in some areas, but we can select these areas with a purpose.

Our actions must be guided by the criterion of economic effect. It may be recalled that, e.g., a qualitative restructuring of Poland's metallurgical sector is estimated to cost Zl 670 billion, and that the authors of a forecast of the national economy's demand for energy in the year 2000 put the necessary spending at Zl 5,700 billion.

Investments are just one side of the problem. There are many reserves in organization, management methods, etc. For example, the already mentioned problem of boiler replacement could be resolved by means of a joint consortium affiliating the enterprises concerned (as they would not manage single-handedly). Such target-oriented associations could be set up in other cases (when it comes, for example, to applications), both by producers and buyers.

But some cause-effect sequences must not be neglected. First, we should define what we want to achieve and in which fields, then seek the opportunities of growth by means other than investment, and only then bring state investments into play (adhering to a clear-cut predefined concept). For example, the last two of the discussed barriers could be described as infrastructure-type barriers, and here the central investments should be the major (but not the only) instrument. This, however, does not seem justified in respect to the first two, where the state's role should primarily be that of an organizer, and only then of a provider of funds and other resources.

Such a conscious selection should be our major guideline not only during the recovery from crisis (which is a misleading word, because the situation of our economy is not critical in terms of economic definition) but also, and more importantly, in the course of normal development after the attainment of equilibrium, which in future should ensure Poland a place in the world economy corresponding to its potentialities. This should be our overriding goal.

CSO: 2600/1152

## FIRM SUES 'ASSOCIATION' IN HARD CURRENCY REVENUE SHARING DISPUTE

Warsaw ZYCIE GOSPODARCZE in Polish No 29, 15 Jul 84 pp 1, 6

[Article by Slawomir Lipinski: "Company Loses Dispute Over Dollars"]

[Text] The Lodz Voivodship Court recently heard a very unusual case, in which an enterprise sued "its own" association in court.

The enterprise involved was the Walbrzych-based Camela Linen Factory. The linen in the company name is more a nominal than actual area of Camela's operations, because linen accounts only for one-fourth of its textiles. Its main production line is what are called clothing linings (of wool, cotton and fiber), i.e., various kinds of textiles used to line blazers, coats or shirt collars. In this production line, Camela holds a monopoly position in Poland, because nearly all clothing firms are dependent on its deliveries. Unlike many other monopolies in Poland, though, Camela meets the demand of domestic enterprises in full, and even sells an 8-percent surplus output abroad thus earning convertible currency.

The defendant in the case was the Lodz-based Polski Len Linen Industry Association, or, more precisely, its board. The board's decision of 14 December 1983, was contested by Camela as incompatible with the law.

## Good Business

One consequence of the fact that some twenty-odd percent in its output structure was linen was that years ago Camela was forced to join the linen-industry grouping, although joining a clothing-industry grouping would have been more logical. When the now defunct groupings ("industry boards") were transformed [under the current economic reform] into industry associations, Camela joined the Polski Len association voluntarily. Why?

Camela's director Janusz Senczuk says this decision was made by the force of tradition, as a first impulse. But later Camela was to see this had very grave consequences. The Camela management knew that an enterprise is watched more favorably by the authorities if it belongs to some association than when it does not. Under the present system, in which an enterprise's performance depends not only on the ingenuity of its managers and the workers' effort but also on the wilfulness of various officials, it is better for an enterprise to be affiliated to an association. Not only can an enterprise feel more secure but also--as was promised not only to Camela--expect considerable advantages from its membership in an association.

One of these advantages was the ROD, or export-revenue allowance bank account, which the association was to keep for the entire linen industry.

The system of RODs came into operation at a time when there were still plenipotentiaries of government ministers for individual industries; the posts of plenipotentiaries had been created hastily in order to watch the transformation of industry boards into industry associations to proceed as smoothly as possible. The plenipotentiary for the linen industry supported his suggestion that a ROD should be opened for the entire industry rather than for every individual enterprise separately with a very convincing argument. He implied that the association would be able to negotiate a higher allowance for an industry-wide ROD than any individual enterprise could negotiate for itself.

Take an enterprise such as Camela, it was said during discussions at the time, which exports directly 8 percent of its output earning between \$0.8 and 1 million, depending on year. But to keep its entire (not only export) production running Camela needs imports worth \$1.5 million. Camela imports plenty of chemicals which Polish factories cannot supply. Most of the funds needed to finance these imports (\$1.3 million) are provided by exporters in the clothing industry with whom Camela has subcontractor deals. The remaining money, i.e., the \$200,000 needed to buy abroad the materials to produce export goods, would have to be furnished by the enterprise from its own export-revenue allowance.

With some simplification, it can be said that the export-revenue allowance rate is determined by the proportion of imports indispensable to the fulfillment of planned export value targets. Since Camela's exports accounted for some 8 percent of its output, then—again with some simplification—its indispensable imports amounted to some \$120,000 (8 percent of 1.5 million). But the foreign-currency revenue anticipated in the export-boosting plan version was, as said before, estimated at \$1 million or so.

The share of this \$120,000 in this million, then, corresponded to a 12 percent export-revenue allowance rate. But, with a view to goading the enterprise into making greater efforts to increase exports, this rate would certainly be even reduced. "You should be happy to be granted an 8 percent allowance rate," it was concluded during those early discussions. If this were the case, Camela would have on its ROD roughly \$80,000 (apart from the currency it would receive from clothing enterprises).

But if the entire industry applied for a collective allowance rate, the situation would be quite different. The calculation would be more involved. The association included nine exports, but 27 enterprises would be entitled to use the money. Since the industry's internal cooperation degree is high, every one of the nine enterprises could prove that it needed foreign-currency funds to keep its exports going. The same, incidentally, was true of exports to socialist countries, which were not always taken into account in determining allowance rates for individual enterprises because dollar allowances are granted from a separate pool kept by the Foreign Trade Ministry.

In other words, were it the industry as a whole which would apply for collective allowance, it would be easier to show by calculations that imports indispensable for upholding export levels should be higher than otherwise. Thereby, the allowance rate would also be higher, because the association commanded incomparably stronger prestige and clout than, say, Camela on its own. Walbrzych is far away from Warsaw.



So, the linen exporters smelled good business in the proposed collective industry-wide ROD. At least, that was what they believed at the time.

By a 11 May 1982 agreement, the aforementioned 27 enterprises joined into an association, authorizing the Zyrardow Linen Factory to lodge an application for a collective allowance rate and "to administer the funds paid to the collective account as export-revenue allowances and to control these funds in keeping with the by-laws," as the pertinent agreement put it.

But, the by-laws were yet to be drawn up, and the Zyrardow factory was charged with this job only because the association had not been officially registered by that time. This is why the agreement included the following clause: "This authorization expires as soon as the association has been granted legal status and the association will subsequently administer the collective ROD on behalf of the enterprises organized in the association."

A few weeks later the association was registered. Apparently, it did not let down the exporting enterprises. It managed to negotiate the high allowance rate of 20 percent. Camela, which, as will be remembered, had been told it would get no more than an 8 percent if it went single-handed, rejoiced. Instead of 80,000, we're going to have nearly \$200,000 in our account, they said. Although the ROD was a collective account, revenue and expenditure were recorded in it separately for every enterprise.

"We believed all along that the idea of a collective ROD amounts to making the association, as a body subservient to the enterprises belonging to it, solely the administrator of the ROD," Senczuk now says. "In other words, we believed the collective ROD would relieve Camela of the indispensable paperwork."

#### Let's Not Quarrel

It soon turned out that the association had no intention of contenting itself with a subservient role toward the enterprises. Its ambitions were greater than that. Ambitions were then followed by actions, and getting hold of foreign currency was--to put it mildly--anything but insignificant.

"I don't mind associations in general," Senczuk says. "But I thought they would be different. Ours is practically taking over the functions of the [now dissolved] intermediate management levels."

Since, as pointed out before, Camela is not a typical linen factory, its dependence on the association--say, for supplies of raw materials--is less heavy than that of other enterprises. So, Camela did not worry particularly about the expansion of the association's role and functions, or about the usually ensuing swelling of its personnel. But Camela was in for a bitter lesson.

In June 1983, the association's executive board endorsed the rules for keeping the ROD. Senczuk disliked them because they endowed the association board, as well as its director, with considerable powers in deciding the order of foreign-currency expenditures from revenue the exporting enterprises earned.



This is a long and, in my view, not precise enough set of rules. Among other things, it says that enterprises will jointly administer the ROD, that the association board will determine the order of expenditures, and that direct exporters' spending needs will be given priority. Moreover, it authorizes the association director to alter the board's decisions (subject to the board's subsequent approval), and to keep a large (10 percent) reserve fund for disposal in the event so-called intervention moves are necessary.

"I and three other enterprises voted against these rules," says Senczuk. But a vast majority of board members voted for the rules. According to the association's statutes, decisions are made by the majority rule. An enterprise may sue a board decision in court if it regards the decision as unlawful.

But the dispute over the rules was prevented. "Let's not quarrel over trifles. Let's wait and see how these rules will work in practice," Camela and other hesitating enterprises were told.

They didn't have to wait for a long time. On 14 December 1983, the association board endorsed the 1984 ROD spending-estimate sheet. It provided for an anticipated revenue of slightly more than \$3.5 million, of which \$177,775 was to come from Camela's exports. The board is authorized to determine the order and, even more important, the exact amount of export-revenue allowances for individual enterprises. Despite Senczuk's protests, the board granted Camela \$60,000, which put the factory on rank 11 among the beneficiaries.

This was a shock. Camela received only one-third of what they thought was their own money.

True, after the rules were approved, the people at Camela seemed to have reconciled themselves to the rule that the association--and thus 27 enterprises--would determine the order of expenditures earned by only nine enterprises. Camela's managers thought that part of their funds might be used to finance imports of some other enterprise, simply because Camela would have money in the ROD at the given moment, but that later the given enterprise would pay Camela off. They even reconciled themselves to the necessity of propping with dollars even the nonexporting association members. But, they were sure that such deals would be negotiated with them on a give-and-take base. Yet despite their protests, Camela was simply docked of two-thirds of their export-revenue allowance. With no compensation at all.

Camela's fight for changing the spending-estimate sheet produced little effect. All Camela achieved was that it was pushed up from rank 11 to 9 in the order of spending foreign currency plus an extra \$12,000, up to 72,000.

But why did a majority of the board vote for this spending-estimate sheet? "That's obvious," says Senczuk, "because the foreign currency is supplied by nine members of the association, but 27 want to spend it. The majority has an interest in granting less to the exporters because in such a case more remains for the others who export nothing."

Although a few others were also dissatisfied with the spending-estimate sheet, Camela alone balked and decided to sue. In its litigation, Camela demanded that the association's spending-estimate sheet be declared unlawful as

incompatible with Article 29.1 of the law on financing state enterprises ("An enterprise has a right to spend part of the revenues it had gained from its exports of goods and services.")

Further, Camela argued that, as a subservient institution toward the enterprises, the association which by its own statutes is to protect their interests and help them achieve optimum effects had no right to deprive Camela of its foreign-currency funds. Camela admitted it had agreed that the association board could draw up the spending-estimate sheet. But, Camela further argued, the proposed distribution of these funds among the enterprises concerned should be at least proportional to the contributions every enterprise made to the ROD.

"So, the point at issue wasn't a quarrel over property, over the specific amount of dollars to be granted, but over the rule that distribution should be proportional to contribution," I am told in Walbrzych.

The association's reply to the lawsuit was extensive and supplied with numerous documents. The association pointed out that Camela had voluntarily signed the agreement by which it abdicated its right "to keep funds in the collective account (...) and to administer (underlining mine) these funds in keeping with the adopted by-laws."

The 28 June 1982, Council of Ministers' No 134 on the administration of RODs stipulates (paragraph 5.2), "The export-revenue allowance rate is determined on the ground of an application submitted by an enterprise or association of enterprises, by a foreign-trade firm or by any other enterprise which are authorized, on the ground of an agreement signed with the enterprises concerned, to administer the ROD on their behalf." Also, in paragraph 3.5 this law stipulates, "If the export-revenue allowance rate is determined for an association of enterprises, then no separate allowance rates are determined for individual enterprises which are parties to the agreement specified in paragraph 2.

Ordinance No 17 issued by the Bank Handlowy president on 16 March 1983, dots the i's, according to the association. In its paragraph 4 you will read, "The economic organization for which the export-revenue allowance was determined is the owner of the ROD. In the case of collective RODs of associations, the ROD is administered by the organization for which a collective export-revenue allowance rate was determined."

Thus, the association argued, the association was both owner and administrator of the ROD. Even more, paragraph 5.3 of order No 134 shows that Camela had no right to claim the \$177,775 in 1984 because the 20 percent rate is a collective one for the entire association while no individual rates are in such case determined separately. Briefly, then, the association was entitled, as owner and administrator of the account, to distribute the foreign-currency funds at its own discretion. Not without its own fault (naivety, ignorance of the law), Camela had hoped for striking a gold vein with the collective ROD, but in effect it only burnt its fingers.

## Painful Lesson

In this situation, the Lodz Voivodship Court ruled that Camela's claim was unjustified. In a first impulse, Camela wanted to appeal. It could use the argument that the 11 May 1982 agreement fails to meet the conditions specified in order No 134. The words "This authorization expires" are followed by the stipulation that the association "keep" the collective ROD. This is inaccurate because the account is kept by the Bank Handlowy.

But Camela eventually preferred not to appeal, recognizing its chances as too slim. This is to be regretted. I am sure that if this matter had once more been meticulously considered, then matters of interest not alone to Camela would have been finally explained. In particular, this might have led up to a clarification of agreements concerning collective RODs, and to an explanation of whether or not lower-rank legal regulations (e.g., the aforementioned ordinance No 17 by the Bank Handlowy president) don't furnish too broad an interpretation of the fundamental relevant law (that on financing state enterprises which, in line with the law on state enterprises, grants enterprises the right to dispose of part of their export revenues). We are going to ask experts to present their opinions on these matters in this journal soon. But for the time being, let us keep to the court verdict.

The judge presiding over the court said in the substantiation of the verdict, "There are no obstacles for which enterprises should not own separate RODs in the future, and in such a case they will not be fettered by decisions association boards may make..."

Sober as this remark is, the expression "there are no obstacles" is out of place. For, when I asked Senczuk if Camela pondered applying for its own ROD he said that Camela would do this. But he promptly added that Camela would probably be refused opening its own ROD for 1985. The export-revenue allowance rate for the association holds till the end of 1986. I am sure that if Camela were granted its own separate allowance rate, the rate for the association would inevitably have to be revised, because the conditions on the ground of which it was determined would be different. Justifying its refusal, the Foreign Trade Ministry could invoke the cited Council of Ministers order No 134 according to which no separate allowance rates may be granted if a collective rate has been established before. It is hard to say whether this argument could not be overruled by a court, but if even a court could do nothing about it then Camela will have its hand tied till 1986 anyway, because it cannot disentangle itself from the collective ROD.

"Under the present system of foreign-currency distribution in the association, I see no incentive for Camela to try to increase its exports," says Senczuk. "What's the point of straining myself if the foreign-currency amount I'm receiving depends not on my effort but on the association's discretion?"

This is essentially the affair's economic aspect.

Apart from the circumstance that more than one enterprise was unhappy with the spending-estimate sheet, the lawsuit again set off the discussion on the association's operation rules.

"Shouldn't an autonomous enterprise have a right to veto association board decisions which it finds unfavorable to itself?" wonders Jan Chlond, Camela's technology manager. He hastens to add that such a veto would not be tantamount to blocking the decision but would merely authorize the dissenting enterprise not to comply with the decision.

But Senczuk says this would be no good because it might paralyze the association. Individual enterprises pursue different interests, as Camela's own example clearly shows.

Thus, the problem of the enterprise-association relationship is reviving, and not only in Camela. Let us therefore again look at the exchange between the two directors.

First, what's the point for an enterprise to join an association if interests tend to divide rather than unite the participating enterprises? Formal integration is little more than a cover-up for simmering animosities. Second, and more importantly, it should be pointed out that association board decisions are binding for the association director. But under no condition may such decisions affect an enterprise's autonomy which is guaranteed by the law, i.e., such decisions must never curtail competences of self-management bodies or enterprise directors.

For example, an association board may not okay a joint association-sponsored investment project—even after a unanimous vote—because decisions concerning investment projects are a competence exclusively of the self-management body. Such a joint association-sponsored project may be started solely on the strength of a decision made by the self-management body concerned.

Let me repeat—any service the enterprise is to render on the strength of an association board decision has to be first endorsed by the given enterprise's competent organ, i.e., its director or its self-management body, which alone are authorized to decide such services. So, it is futile to ponder if an enterprise should veto unfavorable association board decisions which infringe upon enterprise organs' competences, because this board has no right at all to infringe upon the rights of autonomous enterprises. If such practices do happen at all, then they are unlawful.

How does the above argument relate to the above-described dispute over the dollars? This is a special case. By signing the 11 May 1982 agreement (provided it is juridically incontestable), Camela's director in his capacity as one of the enterprise organs waived his right to claim a separate ROD. The self-management body did not express its position on the matter, simply because it did not exist at the time. But now this body does exist. The association board became owner of the collective export-revenue allowance created with the consent of Camela's director. Administering the ROD, the association board does not violate the enterprise autonomy rule, or infringe upon the enterprise's competences, because this enterprise cannot be entitled to administer something which does not exist.

Consequently, a collective ROD endows the association with a great deal of power over the enterprises involved. However, the enterprises consented, although—as in the case of Camela—without realizing all implications. All they can do now is to fight for getting a fair model for distributing the



foreign-currency funds by the association board, which ought to be clearly and accurately defined in a pertinent agreement.

Senczuk says that voting the distribution of foreign-currency funds should be conducted according to rules common in joint-stock companies. The one-enterprise-one-vote rule which holds in the association should be dropped in favor of granting voting rights only to enterprises that contribute to the collective export-revenue account. In this case, then, foreign currency would be distributed by the nine exporting enterprises in the association. But, would the remaining 18 enterprises put up with this? I don't think so.

I, therefore, asked the people at Camela if they are pondering to leave the association, in the face of such a blatant contradiction of interests in the association and after such a disappointing experience? Wouldn't this be the simplest way out of the maze? After all, as of 1985 onwards, the association is going to be financed from profits for distribution.

I am told that Camela's contribution to the association's fund is Zl 1.2 million, or roughly 1 percent of the current profit-for-distribution fund, a sum Camela can easily part with, says Senczuk. It probably can. But, is this expense worth being made at all? To this, Senczuk says the association is now desperately lobbying for subsidies (at least in the form of tax allowances) for modernizing the linen industry. The association is now trying to get its draft modernization blueprint to the government's attention and consideration. "If I pull out of the association now, I may not benefit from the tax allowances," Senczuk says.

It is of course true that tax concessions should not be dependent on whether or not an enterprise belongs to an association, and that economic considerations alone should be taken into account. Camela's linen spinning mill badly needs to be modernized. But the authorities tend to turn a more favorable eye to an enterprise affiliated to some association. Camela's possible decision to pull out of the association would be frowned upon, and, says Senczuk, even more so in Warsaw than in Lodz.

Now this fear of an autonomous enterprise to leave a voluntary association with which it has very few interests in common is the most alarming thing in this story.

CSO: 2600/1151



## ANALYSIS OF NEW PRODUCT DEVELOPMENT PROGRAMS IN INDUSTRY

Warsaw ZYCIE GOSPODARCZE in Polish No 29, 15 Jul 84 p 14

[Article by Anna Krajewska: "Innovation in Enterprises—Lodz University Research"]

[Text] An analysis of innovative undertakings of enterprises presented in this article is a fragment of broader studies on the implementation of the economic reform conducted by a group of workers of the Institute of Political Economy of Lodz University.\* The studies embraced 49 enterprises, a majority of them subordinated to just three ministries: of Chemicals and Light Industry, Engineering and Metallurgy, and Agriculture and Food.

The implementation of the economic reform began at a time of acute shortages of raw materials, energy and hard currency compounded by a rapid decrease in employment. In these circumstances, enterprises' efforts were concentrated on solving current problems. In 1982, enterprise managers faced the biggest headaches because of acute labor shortages caused by a massive outflow of people into early retirement or child care leaves. Therefore, the emphasis was on stemming this outflow (which was stressed by 43 enterprises) and on ensuring proper supplies of materials (39 enterprises).

In 1983, the reduction of employment became less of a problem and fewer enterprises pointed to supply difficulties. This may have been caused by the fact that, taking advantage of their autonomy in fixing their production plans, the enterprises flexibly adjusted their production volumes and structure to current possibilities resulting from the availability of materials.

The most important problem, first noticed in 1982, now became the enterprises' fears about the availability of resources for the indispensable replacement projects. Only less than 30 percent of enterprises declared that they anticipate no problems with satisfying their indispensable replacement needs. However, these were mostly enterprises which managed to replace most of their equipment in the 1970s.

\* The study was commissioned by the Institute of the Functioning of the National Economy (IWGN) of Warsaw's SGPiS within the interministerial research project 11.10, subject group III-01

Alas, among the problems which did not preoccupy enterprises greatly was the problem of innovation and the related questions of quality and modernity of products, lowering of costs and profitability of export production. It turns out that so far the mechanisms of the reform have not resulted in the emergence of innovation-oriented attitudes of enterprises. It is even possible to venture the view that the negative determinants of innovative activity, which existed prior to the introduction of the reform, have remained or even intensified, to mention the seller's market, the monopolistic position of domestic suppliers (combined with weak anti-monopolistic mechanisms), the lack of a clear correlation between the incomes of groups of employees and their innovative activity, the influence of producers on the prices of products through the cost-plus formula.

The stimulation of innovation and efficiency-oriented attitudes is not facilitated by the system of settling accounts with the state budget. The very steep progression of taxation rates, of which all enterprises complained in 1982, persuaded them to pursue a strategy of limiting the amounts of money they paid to the budget.

Such an attitude was encouraged by the system of concessions, which was especially expanded in 1983. As a result enterprises have been concentrating their attention on obtaining tax relief instead of on efforts that might result in great efficiency. Besides, it does not appear that the policy of awarding the concessions is in any way related to the distinct priorities selected in the economy. Experience shows that in many instances the decisions are arbitrary or depend on behind-the-scenes bargaining and influence.

The concern about current affairs (resulting both from the difficult economic situation of the country and from the systems which puts emphasis on quantity), the continued weakness of economic stimuli and the illogicalities and inconsistencies of the tight money policy—all persuade enterprises to look for economies in cutting outlays on research and development activities, among other things.

Despite the reasonably good state of the R&D establishments they record a fast decline in employment while the financial situation of their employees is distinctly deteriorating. In this situation, able engineers and highly skilled workers quit these organizations as they are able to find attractive employment elsewhere. This threatens to result in a negative selection of staff and a weakening of the establishments for many years as it will certainly take long to restaff the institutes in question.

In view of the troubles connected with uncompensated depreciation of productive assets and shortages of raw materials and parts, the attention of R&D units shifts more and more often to finding substitute materials and processes, frequently inferior to those used previously, or the production of missing spare parts, etc. In the present circumstances, this is certainly rational from the enterprises' point of view as it makes it possible to move away the barriers of the growth of production, in which a high technological level is not now a prerequisite of selling the goods on the domestic market in most commodity groups.

However, in the longer run, such a situation threatens to lead to a deepening of technological backwardness of the Polish economy. Already now the first symptoms of it are visible in the form of the growing difficulties with the export of manufactured goods and the lowering profitability of these exports. With regard to some groups of products, their producers have pointed to problems even with maintaining their standard at the present level.

The reform introducing the principle of self-financing of enterprises has radically changed the principles of financing R&D activities. Let us trace back the changes that have occurred in the financing of innovative and investment activities of selected enterprises on the basis of the available statistics.

The principal source of funding research and development projects is the fund for technological and economic progress that is made up of surcharges that go into the costs of the operation of the enterprise. With regard to the amounts making up these funds, it is possible to note some advantageous trends. In line with the principles in force in 1982 and 1983, the enterprises which had such a fund in 1981, keep accumulating money in it (usually according to the same principles as before) while they can use 50 percent of the means accumulated in that account. As a result, most enterprises now have at their disposal much more money than they used to have. This creates opportunities for broadening the innovative activities of the weaker enterprises, whose needs are as a rule ignored in the technology development policies pursued by huge artificial creations such as the former industry boards.

The latter group was exclusively made up of enterprises in which employment was rapidly declining and the spending on welfare activities, housing and bonuses reflected an endeavor to dissuade the employees from deserting.

The profit at the enterprises' disposal are the main source of funds for the development fund; in fact, its role as this source has considerably increased. In 1982, funds taken from profit made up over 50 percent of the development fund in 21 enterprises, while a year later this figure rose to 37 enterprises. The share of depreciation allowances and other sources of money for this fund (e.g., the sale or disposal of redundant fixed assets) has been clearly diminishing.

It is possible to draw several conclusions from the analysis of the way in which the money accumulated in development funds is used:

--A considerable part of development funds is earmarked for the repayment of investment credits obtained in the 1970s. As many as 30 of the 49 enterprises examined are repaying such credits. In 1983, in nine enterprises credits took up less than 10 percent of the planned fund, in six enterprises it accounted for between 10 and 30 percent, in 10 enterprises for 31-50 percent, in three enterprises for 51-70 percent and in two enterprises for over 70 percent.

--It turns out that 32 enterprises used some 30 percent of the means accumulated in development funds for financing the purchase of working capital because of difficulties with obtaining short-term credits.

--Only a half of the enterprises examined fully used the money accumulated in their development fund, 10 enterprises used between 75 and 99 percent of the sums, and 15 used less than 75 percent of the funds. However, only 6 enterprises reported that the incomplete use of the development funds was caused

by modest development programs. The remaining enterprises gave the following reasons for the incomplete use of the funds: the too slow execution of investment projects by construction enterprises, the lack of building contractors willing to work on the project, the limited possibilities of purchasing capital equipment.

As a rule, the enterprise examined reported a moderate demand for credit. I presume that the managers of enterprises have come to believe that with the reform in force the borrowed sums must be fully repaid from the enterprise's own incomes, which leads them to make honest appraisals of economic efficiency. These sound tendencies observed in enterprises are neutralized by formalistic and bureaucratic limitations of access to credit, imposed by the banks in the name of the policy of strict budget restrictions.

The analysis of product and technology modernization undertakings of enterprises makes it possible to pinpoint the good and the bad sides of the reform mechanisms. Alas, the latter predominate.

It is possible to identify two positive changes. First of all, enterprises have been making endeavors to eliminate or limit expenses on unproductive modernization ventures. Second, the attention of enterprises and R&D establishments related to them is focused on the solving of down-to-earth problems arising on account of the shortage of definite materials, components or spare parts. The resulting designs may often be of a low technological standard yet they make it possible for the economy to make better use of its capacity at a time of the crisis. However, this is a relative merit and might as well be interpreted as a sign of the weakness of the reform mechanisms.

As for the weaknesses, they are quite numerous, as I have said before.

The most conspicuous thing is the lack of an active and coherent central policy with regard to innovation. The manufacturers' associations play a very insignificant role in this respect, despite the fact that this was going to be one of their principal aims.

Enterprises are still not forced to engage in innovation undertakings by economic considerations (enterprises may reach their aims without paying too much attention to modernization ventures or even engaging in no such ventures at all). Much attention, probably even more than before the reform, is paid to current activity.

There has been no sufficient progress in demonopolizing the economy, and in the crucial domains it is still a producer's market.

Most prices are still based on the cost-plus, and enterprises have greater influence upon their level than before the reform.

Finally, the crises resulted in serious cuts in outlays on the introduction of new products and processes. The reform mechanisms have failed to put sufficient emphasis on innovation. As a result, enterprises seek economies by cutting outlays on R&D and ignoring the needs for specialist equipment needed for these activities.



Is there a way out of it? It appears that a modification of economic tools narrowly oriented toward rationalization and stimulation of innovation can hardly be expected to produce great economic results. It is necessary to have a whole innovation-oriented system of functioning of the economy. So far the reform has neither produced promising specific solutions nor creating a conducive climate for innovation.

#### Division of Profit

Percentage of the overall value of profit	Reserve fund		Development fund		Workforce participation fund	
	1982	1983	1982	1983	1982	1983
	number of enterprises					
Below 10%	11	18	--	--	4	2
10-30%	30	29	6	2	16	26
31-50%	--	1	8	9	14	17
51-70%	--	--	19	27	6	3
above 70%	--	--	8	10	1	--
n.a.	8	1	8	1	8	1

N.B.: the figures for 1983 refer to planned indices. However, the statistics for the first half of that year largely reflect the tendencies appearing in the distribution of profit in enterprises.

CS0: 2600/1151



## LONG-RANGE DEVELOPMENT OF RAILROADS ASSESSED

Warsaw EKSPLOATACJA KOLEI No 4-5, Apr-May 84 pp 97-102

[Article by Roman Losinski: "Principles of Development of a Technical Base for Railroads to 1990"]

[Text] Roman Losinski, master engineer, is a graduate of the Communications Division of the Warsaw Polytechnical Institute. At present he is the director of the Division of Communications Development in the Department of Economics of the Ministry of Communication. He has been professionally involved in the development of the technical infrastructure of transport for 20 years. He is a consultant for the transportation service on documentation for basic studies of projects and their effect on the transportation structure of the region and the country.

Transport difficulties became apparent in the 1960's, and more precisely, in the second half of the decade. As a result of inadequate development of the technical base of transport and increasingly intensive use of it, the growth in transport capacity proved to be inadequate in the face of dynamically growing transport demands. Backlogs began to pile up in routine maintenance and in modernization of the technical infrastructure. As a result of underestimating transport needs and the role of transport in serving the national economy, a state of transport inadequacy developed.

Unprofitable trends in implementing the transport policy in Poland are evident specifically in the drop in proportion of value of productive gross of fixed assets engaged in socialized transport: from 9.9 percent in 1970 to 9.2 percent in 1981. At the same time, we must add that in 1981 the situation was significantly better in this area in most European socialist countries (Bulgaria, Czechoslovakia, and Hungary, more than 15 percent; Romania and the Soviet Union, more than 13 percent).

This highly unprofitable state was caused by a long-term underinvestment in transport.

In 1981, Poland allotted only 8.6 percent of total national expenditures for the development of transport and communications while Bulgaria allotted 12.2 percent; Czechoslovakia, 11.2 percent; Romania, 10.1 percent, Hungary, 11.8 percent; and the Soviet Union, 12.1 percent.

It is universally recognized that the ratio of expenditures for transport to total expenditures should be at least at the 14 percent level in Poland. This is required by the structure of the Polish economy, which is more transport-intensive than that of other countries.

As a result of the limited flow of technical and financial capital, a rapid decapitalization of all transport, especially railroad transport, ensued. The national economy began to suffer losses caused specifically by irregular supplies of raw materials and manufactured goods, unnecessarily long transit times for shipments, undependable transport of workers, etc.

#### The State of the Technical Base of the Railroad in 1982

Railroad transport plays a leading role in the national transport system in satisfying transport needs, carrying approximately 70 percent of total land freight. This is why the state and potentials of rail transport cannot be a matter of indifference to the national economy.

The present unsatisfactory state of rail transport is the result of decapitalization of the technical base that has gone on for many years. Evidence of glaring neglect is the size of the coefficient for renewing capital stock as compared with the whole national economy and particularly as compared with the "industry" section. In the whole national economy this coefficient went from 9.8 in 1975 to 5.9 in 1981; in industry it went from 12.9 in 1975 to 5.0 in 1981, but for the Polish State Railroads (PKP) it went from 4.7 in 1975 to 3.5 in 1981.

As a result of inadequate maintenance of capital investment, and somewhat meager funds allotted for modernization and development, a gap developed between PKP and European railroad management at the technical level and quality of transport services rendered (in Poland only on the Warsaw-Poznan line are passenger trains allowed to maintain an average speed of 85 km/h, while, for example, in France, Great Britain and West Germany speeds are twice as high on lines that are several times longer). This poor state of basic factors of the railroad technical base is evident in practically all elements.

A significant proportion of rail lines has a limited traffic capacity because of the poor state of the roadway, bridges and viaducts. More than 30 percent (of a total of 69,000) of the switches have been in operation more than 25 years while the normal lifespan is 14 years; approximately 26 percent of the cross-ties built into the roadway (of a total number of 77.2 million) have already exceeded the normal life span of 16 years; a fair percentage of the bridges and viaducts requires reinforcement or total replacement. The proportion of rail lines equipped with an automatic block system is insignificant (4.4 percent). Arrears in capital repair of railroad surface on rail lines and station tracks is estimated to total approximately 11,000 km continuous replacement.

Among the buildings used by PKP (roundhouses, car barns, yards) nearly 60 percent were built in 1920-1939. They are worn out to a significant degree

and do not meet current requirements. Practically all of the main switching stations require major modernization involving reconstruction of profiles and track systems as well as track braking assemblies and automatic equipment for switching operations. The rolling stock used by PKP that does not meet world technical standards and the inadequate number of cars exacerbate the difficulties of the railroads.

The freight cars that are in use have sustained major damage, make mechanization of loading impossible and are labor-intensive in maintenance and repairs.

The inadequate repair back-up potential, the unsatisfactory supply of repair and replacement parts and the significant shortage of workers make it necessary to keep a large number of technically inoperable freight cars (approximately 54,000 in 1982).

The inadequate state of the technical base and the excessive overloading with freight result in continuous worsening of the functioning of the railroad. Evidence of this is, specifically, the turnover time of freight cars from 4.53 days in 1970 to 5.28 days in 1982, the drop in average number of days of locomotive operation, worsening of travel conditions and increase in number of accidents on the railroad.

It is worth noting, however, that despite the many various difficulties with which rail transport is confronted in Poland, PKP is unique in Europe. It carries significantly more freight tonnage than German or French trains. Transport labor per km of track and per freight car is also greater on the PKP. The dimensions of the disproportion in this area are presented in Figures 1, 2, and 3 (compiled on the basis of data contained in the UIC statistical annual for 1980). If we consider the long-term neglect in the area of technical outfitting, we must admit that PKP did quite well in fulfilling transportation tasks. This was done, however, at the cost of degrading the technical base. For this reason also the range of renewing and modernizing is due more to the need to catch up with arrears than to accommodate current growth in transportation demand.

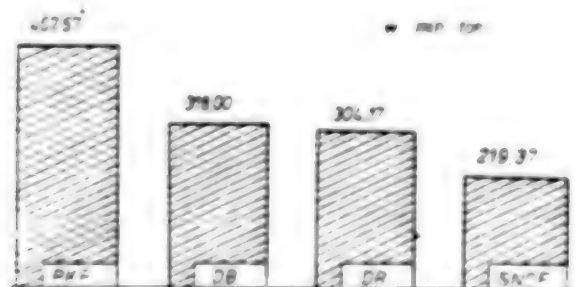


Figure 1. Freight Transport on Some European Railroads in 1980, in Millions of Tons

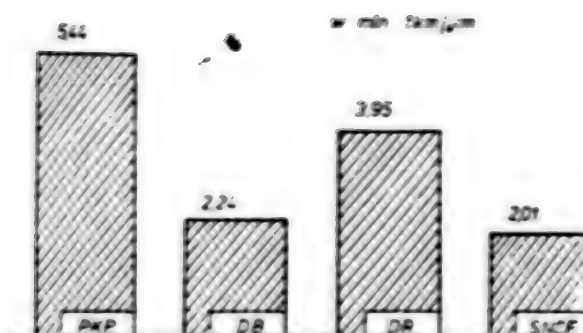


Figure 2. Load per km of Rail Line of Some European Railroads in 1980, in Millions tkm/km



Figure 3. Load per Freight Car of Some European Railroads in 1980, in Millions tkm/car

PKP, 0.68; DB, 0.22; DR, 0.39; SNCF, 0.40

#### Modernization and Development of the Railroad Technical Base to 1990

The poor state of the railroad's technical base makes it necessary to give preference in some way in the immediate future to activities that involve: making the technical infrastructure maximally efficient and productive; guaranteeing the supply of rolling stock (locomotives and cars) during the 5-year periods; assuring a definite growth in transport potential. It is, therefore, necessary in the period before 1990 to concentrate on reconstruction investments and on the way "narrow margins" are broadened or eliminated in the elements of the technical infrastructure of the railroad.

It is expected that a noticeable improvement in railroad operations will occur only after 1990 when many of the projects are completed. In the first order, we must arrest the process of progressive decapitalization of plants and equipment, particularly of the rail lines. In this connection, in 1982 we envision a growth in the rate of capital improvement of the railroad beds from approximately 2100 km of continuous replacement of rails to approximately 2800 km in 1990 while simultaneously increasing replacement of cross-ties, switches, and ballast.

It is expected that attaining the set rate of capital repair of the roadbeds will make it possible by 1990 to decrease arrears with respect to the status in 1982 by approximately 30 percent, that is, by approximately 3300 km.

Capital repairs, such as roadbeds, bridges, tunnels, and culverts, should be undertaken over a significantly more extensive period. Of a total number of 3272 steel bridges and viaducts, approximately 36 qualify for replacement, reinforcement, or repair.

Repair of the road surface and engineering construction will result in a decrease in number of speed limitations imposed on trains and will make it possible, moreover, to raise and standardize axial thrust on rails over all the transport lines. These measures will make it possible to run trains with greater loads and at higher speeds and that will have a positive effect on the consumption of fuels and energy for traction.

Modernizing the rail lines will specifically require: a progressively increasing materials supply and equipping the line workers with modern machinery and tools for repairing the road surface and for roadbed and bridge work. The planned additional equipping of the road service with machinery and gear should make it possible by 1990 to reach an index of mechanization of work of 8.5 kW/km roadbed (4.4 kW/km roadbed in 1982).

At the same time, for increasing service-repair capability and ensuring production of replacement parts for highly productive roadbed machines, we must modernize the repair facilities for these machines (3 sections and 19 bases). In addition, to increase the level of mechanization of roadbed surfacing and increasing the scope of recovery of used paving materials, we envision the modernization of 20 surfacing bases and 6 switching bases.

The assumed increase in annual range of capital repairs to the traction network requires equipping maintenance units of the network with adequate fittings and specialized rolling stock.

The back-up facilities for traction and railroad car use are an essential element of the technical base of the railroad system that requires radical improvement. By restoring used and constructing new cubic capacity equipment and acquiring additional technical equipment such as machinery and tools, we will attain an increase in service-repair capabilities in the roundhouse and car barn.

Extension of the service-repair potential should ensure the desired improvement in the technical condition of the rolling stock, in the exploitation and economic results of the PKP enterprise and an improvement in the safety of rail transport.

By 1990, we envision modernization of 26 roundhouses and construction of 15 new facilities for the traction service. These facilities should have trackside lathes for dressing locomotive wheel assemblies without dismounting them from the carriages.



Modernization-development projects for servicing railroad cars include construction of 11 new car barns, 10 stations for routine maintenance of freight cars, 2 buildings for maintenance of passenger cars, 3 wash houses for freight cars and modernization of 3 car barns. Implementing these projects will make it possible to add approximately 1600 new, covered spaces in the railroad car facilities.

To create conditions that would make full technical and sanitation service of passenger cars possible, we must build at least 10-15 car park stations into the PKP network. We expect to begin building four stations by 1990: in Lublin, Krakow, Poznan, and Warsaw.

A real problem in rail transport operation is the inadequate potential of repair shops for rolling stock. To meet the needs of the railroad for locomotive and railway car repair more adequately, in addition to adaptation investments, we will need to extend and modernize existing plants. This will solve the problem of repairs (when the required state of employment is met and the supply of needed materials and replacement parts is assured) only with respect to electric traction units and passenger cars. There will still be deficits in repairs to electric and diesel locomotives and freight cars. In this connection, inspection repairs of freight cars will, of course, have to be done in car barns. The anticipated broad range of modernization work includes modernization and streamlining the work of switching stations. The location of modernized installations is presented in Figure 4.

Work on modernization will include, in first place, reconstruction of roadway structure, installation of track brakes (departure and arrival) and equipment for automating switching operations. In most urgent need are 20 installations in which approximately 75 percent of all switching operations are concentrated. But real possibilities, limited by financial means, materials, etc., will allow modernization of not more than six switching stations by 1990 (Figure 4). In addition to increasing productivity of these installations, which are basic for the railroad, realizing aims in this area will, specifically, improve working conditions and safety for personnel, decrease damage to rolling stock and shipments and make the appearance of technical progress in the transport process apparent.

Repairs to rail lines and modernization of switching stations will be accompanied by work on modernization of safety equipment in rail transport. Modernization measures in this important area of railroad exploitation will include in the first place: equipping the rail lines with automatic block systems (at a rate of at least 250 km annually), replacing mechanically moving arm signals with light signals, installing automatic equipment for braking trains, radio communication with trains and automatic crossing signals.

The anticipated growth in the demands of the national economy and the population for rail shipment with a simultaneous need for improving the quality of services rendered requires ensuring the production and supply of new, better built rolling stock, both engines and cars as well as machinery and equipment.



Figure 4. Location of Modernized Switching Stations

Key:

1. Basic switching stations with a theoretical capability of processing 2000 cars per day
2. Basic switching stations with a theoretical capability of processing more than 2000 cars per day
3. Not scheduled for modernization
4. Modernized before 1985
5. Modernized during 1986-1990

The rolling stock industry must set into motion the production of passenger cars adapted to high speeds and equipped with forced air heating; specialized freight cars; traction vehicles with thyristor starters and set speed governors; electric traction units adapted to electrodynamic braking and, what is equally important, ensuring greater durability and endurance of subunits and decreasing the energy consumption of railroad engines.

With respect to the structure and kinds of rolling stock, indispensable are procurements of: closed freight cars, 1000 kW electric locomotives for switching operations at switching stations, 882.3 kW and 1654.4 kW diesel locomotives (1200 and 2250 metric hp, respectively) and rail buses for local passenger service.

The total requirements for rolling stock in 1983-1990 are estimated as: 68,000 freight cars, 4750 passenger cars, 520 electric traction units, 200 rail buses, 1060 electric locomotives and 750 diesel locomotives.

In addition to the renewal-modernization projects, in order to meet future transport needs, we will also undertake projects of an investment type. Among these of essential significance will be: electrification of rail lines, construction of new and extended roadbeds and continuation of construction (in a short period) of new rail lines.

The goal is to electrify 70 percent of all rail lines, that is, 17,000 km, on which approximately 90 percent of all transport operations will be concentrated. The order of electrification of individual lines is determined primarily on the basis of their present transport volume and the function they fulfill in the basic system of the rail network. In 1983-1990, we intend to electrify approximately 5000 km of rail lines, that is, approximately 600 km annually (Figure 5). Profitable realization of this installation will make it possible by 1990 to have 12,500 km of electrified rail line, that is, approximately 51 percent of all PKP lines in use. In addition to increasing the transport capability, electrification will result in decreasing energy consumption and operating costs of the railroad, which, in the face of the severe shortage of fuels and energy, makes definite economic sense.

New and longer roadbeds will be constructed along the most heavily used shipment lines and in areas of dense urban-industrial development. By 1990, we anticipate building a total of approximately 450 of these roadbeds, and included among the more important projects are: beginning construction of new pairs of tracks for the following sections: Legionowo-Warsaw Gd., Zabkowice-Katowice-Gliwice and Katowice-Tychy, and building other tracks for the sections: Jelcz-Wroclaw, Pilawa-Otwock, Pilawa-Minsk, Zgierz-Lowicz, Lowicz-Kutno, and in the Silesia area.

In the way of building new rail lines, in 1986-1990, we anticipate continuation of the construction of a central arterial railroad in the Korytow-Wyszogrod area with a branch to Nasielska, and extending it in later years to Plock.



Figure 5. Electrification of the Rail Network

Key:

1. Electrification status at the end of 1982, 7410 km, that is, 30.5 percent of the entire PKP network
2. Anticipated scope of electrification during 1983-1985, approximately 1460 km
3. Anticipated scope of electrification during 1986-1990, approximately 3600 km
4. Note: By the end of 1990 we anticipate that approximately 12,500 km of rail lines will be electrified, which is 51.3 percent of the total length of the PKP line

Considering the present state of the national economy and the lack of information with respect to the scale of its further development, these modernization-development proposals may awaken doubts as to their feasibility. One thing is certain, however: they are indispensable if the transport system is not to be a barrier that limits the development of the country.

One of the conditions for realizing the projects discussed is introducing systemic solutions that would allow PKP to attain financial self-dependence. Understanding and recognizing this need will undoubtedly be a green light for the railroad.

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CSO: 2600/1119



## 'BANK HANDLOWY' DEFAULTS ON SWISS OBLIGATIONS

Frankfurt/Main FRANKFURTER ZEITUNG/BLICK DURCH DIE WIRTSCHAFT in German  
26 Jul 84 p 1

[Article by Heinz Brestel/]

[Text] "This definitely would have never happened to the Hungarians, and the GDR would first have gone to Moscow for advice. What the Poles have done in the Euro-capital market can only be explained by total ignorance on the part of the managers of Poland's foreign trade bank Handlowy--managers who are lacking any market sensitivity and who are behaving like a bull in a china shop." These are the comments made by Swiss bond traders on a matter whose substantive importance is almost insignificant but which, as a matter of principle, has developed into an issue of first-rate importance. A "Polish (notes) mess", that is the term that is being used in Zuerich to describe the Poles in a not very complimentary manner.

As reported in BLICK DURCH DIE WIRTSCHAFT of 7 October 1984, the last SFr 12.3 million installment of a private placement of the Handlowy Bank came due on 2 May 1984. But Handlowy hasn't made any payments. It isn't just a question of obligations listed on the stock exchange, but of notes, i.e., bonds, that are not traded at the stock exchange but by banks over the telephone. The notes were issued five years ago as bearer instruments. That means they can be traded freely and anonymously and held by anyone. Whoever presents the security to an agreed-on correspondent bank in Switzerland, when the interest coupons or the bonds themselves are due, is entitled to claim the amount in Swiss francs. This is what was agreed in the conditions section of the Polish debt certificates and this is what is customary in the international capital market.

Nevertheless, the Handlowy Bank refuses to pay "without reservation" the SFr 12.3 million to the bondholders. Its view is that, in all likelihood, a portion of the notes is not even in private hands but in bank portfolios, probably the very banks to whom Poland owes far larger amounts and which are currently again in rescheduling negotiations with the country that is bankrupt in its foreign exchange holdings. The Poles are taking the easy way out. If there are to be renegotiations--they say--then all bank claims must be lumped

together. In more concrete terms, the 1979 Handlowy notes should not be treated any better (and in the Polish view, not any worse) than the claims of banks awaiting rescheduling.

Thus, after the notes came due in early May, the Poles demanded that the respective Swiss banking consortium, which originally sold the bonds, "separate the chaff from the wheat." Poland, they said, is entirely willing to pay off the debts in francs to the owners of the notes, but not to banks which submit the Polish bonds. Thus, the burden of proof as to who, in the Polish view, should enjoy the favor of getting his money back would be on the creditors who would be required to present to the Poles affidavits concerning their ownership, stating the name and address of the owner.

Meanwhile, a group of Poland-note creditors who suffered losses has been formed in Geneva. They are still examining a wide variety of ways of how best to pressure the Poles into making the payments.

It is possible that the creditors may go to court in Switzerland to simply have the debtor, the Handlowy Bank, declared insolvent. In that case, the creditor group could win the right to search throughout the world for assets owned by the bank and to confiscate them in order to settle the SFr 12.3 million debt. It's no secret that the Handlowy Bank owns assets in excess of \$100 million in Swiss credit institutions. And banks know, of course, exactly where these funds are deposited. Intervention "through a marshal" is, therefore, a possibility. How this would damage the image of the Polish foreign trade bank is easy to imagine. For that reason, the creditors continue to hope that they will be able to do without a legal process under Swiss law in order to achieve repayment of the debt, and that the Poles--legally driven into a corner-- are willing to repay the remaining debt "without reservation."

Whatever the outcome may be, Poland's behavior has created an important precedent in the international capital market. Until now, even the poorest debtors--including South America--have always serviced and repaid their debt obligations on time, because the debtors know that court judgments on debt repayments are easy to obtain. Accommodating the Poles today could add grist to the mills of other debtors and the entire bond market would undergo a crisis of confidence.

In all probability, it would then no longer be possible to float bond issues unless they are issued by first-rate creditors, whose credit standing is beyond all doubt. Not only Poland, but the entire Eastern bloc wouldn't have the slightest chance for the next 10-15 years to successfully float any kind of bond issue. Thus, the Poles with their behavior are doing the worst imaginable disservice to their East bloc comrades. It is this realization which gives hope to the belief that other East bloc countries may put pressure on the Handlowy Bank to put a fast end to the "stop exercise". Otherwise, the Polish notes will soon be the subject of new headlines, big enough to paper the walls. This would then be a visible reminder in the "historical securities" market for those gullible souls among foreign investors who were credulous enough to transfer their sympathies for Poland to the Polish communists.

## CHEMICAL INDUSTRY SITUATION, ORGANIZATION OUTLINED

## Assessment of Annual Plan

Warsaw CHEMIK in Polish No 6, Jun 84 pp 151-155

[Article by Zdzislaw Lapinski: "Assessment of the Economic Situation in the Chemical Industry From 1983 to 1984"]

## [Text] Introduction

The 300,000 workers of the nation's chemical industry are presently observing the twenty-first "Chemist's Day." The Polish Chemical industry, rebuilt from its destruction during World War II and developed in succeeding years, has by now become the carrier of technical progress and a deciding factor in our country's economic development. Without chemistry, the development of certain basic subsectors of our economy such as agriculture, construction, motorization, electronics, ship-building, etc., would have been impossible. In other nations, even the most developed, the chemical industry has advanced considerably faster than all other areas of industry. In Poland, the progress begun in the 1970's has gradually lost pace and this has been one of the causes of our present economic difficulties. A more than 15-percent reduction in chemical production during the years 1981-1982 has been caused by investment delays and a lack of hard currency for import of raw materials and spare machine and equipment parts and a reduction of employment. The basic goal of 1983 has been to alleviate the drop in chemical production under these conditions and to improve the national economy's supply of basic chemical products.

## I. The Performance of Tasks for 1983

In 1983, the consolidated Ministry of Chemical and Light Industry produced and sold 1,670 billion zlotys worth of products and thus achieved a growth rate of 107-percent over 1982. The chemical and fuel industries together generated 913.6 billion zlotys and achieved a growth rate of 108 percent. This means that the chemical and fuel industries produced 54.7 percent of the ministry's profits while employing only 29.9 percent of the ministry's work force. In relation to 1982, there was an increase in products sold in all branches of the industry except for just a few enterprises.

In the production of primary products, the chemical industry has more than met the tasks assigned by the 1983 Central Annual Plan in 16 out of 21 of the most important product assortments. This concerns such products as gasoline, sulfur, fertilizers and synthetic substances, synthetic rubbers, chemical fibers and tires. In three of the remaining five groups of products, the deficit according to the Central Annual Plan was slight (less than 1 percent) and in the other two, sodium hydroxide and tires, the deficit was 5.8 and 3.5 percent, respectively.

In 1983, there was an increase over the 1982 level of production of a majority of the most important products. There was a relatively high growth rate in the production of tires (123.3 percent), latex synthetic rubbers (119.9 percent), synthetic fuels (116.5 percent), chemical fibers (114.1 percent), soda ash and heavy soda (110.5 percent).

In comparison with 1979, the level of production of 13 product assortments achieved in 1983 is still low. Nevertheless, the 1983 level of production of eight products on which we have comparable data exceeds that of 1979. These products are sulfur, polyethylene, vinyl polypropylene and vinyl polychloride, pharmaceutical products, soaps and laundry products.

Qualitative tasks in the supply of consumer goods were also achieved with considerable margin. The value of products supplied by the Ministry of Chemical and Light Industry in 1983 was 613.1 billion zlotys. Considering current retail prices, this was 38.3 percent higher than the same figure for 1982. The value of products supplied and directly produced by the chemical industry or by trade centers reached a value of about 277 billion zlotys, 33.2 percent higher than in 1982.

In a qualitative sense, the increase in prices over the year and the good supply of some products, especially those covered by operations programs, had a great influence on the high growth rate of consumer supplies. The relatively high growth rate of supplies in natural units, in comparison to 1982, was achieved in such product groups as non-diesel engine fuels (114 percent), hand soap (111 percent) and rubber and rubber-and-cloth boots (113.3 percent). In comparison to 1982, a significant increase in production was achieved in cleaning and hygienic products such as wash powder, soap and toothpaste and this has made it possible to compensate supply with demand and to develop stocks in commerce.

Despite its great growth rate, the level of supplies of many consumer goods continues to be unsatisfactory. This concerns products such as gasoline, shampoo, rubber and rubber-and-cloth shoes, lacquer products and photochemical materials.

The production of goods for export fell somewhat below planning in 1983. The value of total exports realized by the ministry was 93.5 percent of the plan. A total of 102.6 percent of exports was to the first payments area [socialist countries] and 86.9 percent was to the second payments area [capitalist countries].



In comparison with 1982, there has been a drop in total exports to 93.6 percent, while those to the first payments area remained on the same level as the preceding year and the second payments area exports dropped to 89.1 percent.

In relation to the amount of supplies planned in trade protocols, exports to the first payments area such as chemical fibers (189.8 percent) and pharmaceutical products (123.6 percent) were higher. On the other hand, there were no exports to the first payments area of products such as synthetic rubbers, vinyl polychlorides, and truck and automobile tires.

Exports of synthetic rubbers, fuel oil, chemical fibers and automobile tires to the second payments area were high. However, in many product groups, the exports were not realized and this is primarily the result of a shortage of product tonnage for export and the economic restrictions imposed by some western countries. Furthermore, a strong inhibition to exports to the second payments area has been the drastic limitation of importation of many raw materials and semifinished products from this area.

The ministry saved 18.9 billion zlotys by not having to buy imports from the second payments area, i.e., 15 percent of all imports, which means a 23.3 percent drop in comparison to 1982. Despite less than full value realization (88.7 percent), the level of imports from the first payment area was higher than planned for products such as synthetic rubber, conveyor belts, coolant gases, fuel oil and pharmaceutical products. On the other hand, the supplies of phosphorus materials, potassium fertilizers, technical carbon and polyethylene were not fully realized.

The ministry realized 81 percent of its centrally planned investment and 88.1 percent of its construction projects. In 1983, the following facilities went into operation:

-- at the Wloclawek Nitrogen Works, a polychloride vinyl plant with an output of 200,000 tons per year;

-- at the Police Chemical Works, a 438 MW number two thermal electrical power plant;

-- at the Wloclawek Nitrogen Works, the first stage of the waste purification plant with an output of 38,500 m<sup>3</sup>/h.

The following projects were completed:

-- at the Police Chemical Works, an ammonia plant (line B) with an output of 250 tons/year;

-- at the Wloclawek Chemical Works, a vinyl chloride plant and a solvents plant with a yearly output of 205,000 tons and 40,000 tons, respectively.

The realization of tasks for 1983 was accomplished with an average personnel employment of 855,600 persons at the ministry's industrial enterprises.



This is 31,000 fewer employees than in 1982. Employment in the chemical and fuel industries was 255,700 persons, which is 2 percent (5,300 persons) lower than in 1982.

The level of monthly emolument in the ministry along with recompensation and bonuses from profits amounted to 13,780 zlotys in 1983, 3500 zlotys (almost 35 percent) higher than in 1982. Correspondingly, the average monthly salary in the chemical and fuel industries was 14,655 zlotys. This was 875 zlotys higher than the average salary of other workers in the ministry and 3,380 zlotys (30 percent) higher than the average 1982 salary.

The 7-percent increase in sales throughout the ministry and a 3.5-percent drop in employment has resulted in an increase in individual personnel productivity, as measures by the value of sales, of 11 percent. The chemical industry has had a growth in output of 13 percent and the fuel industry, 6.4 percent.

All of the economic activity of the ministry's enterprises has produced a total profit of 184 billion zlotys. Sixty-three percent or 115.2 billion zlotys of the overall profit goes over to the state budget. On the other hand, in the enterprises of the chemical and fuels industry, a net profit of 107.3 billion zlotys was generated and 71.9 billion zlotys or 67 percent of these earnings was given over to the state budget.

In summarizing the realization of tasks in 1983 by the chemical industry, we can state that there have been positive signs in many areas, and among these we find:

- good overall growth in production over last year, and in many areas rather significant growth that has made it possible to somewhat better meet demand;

- good results in the production and supply of agricultural fertilizers despite the poor technological state of fertilizer plants and a shortage of ammonium sulfate, ammonium nitrate and superphosphate dust; the agricultural supplies of nitrogen fertilizers in 1983 amounted to 1,347 tons of pure ingredient and were 10 percent higher than in 1980; analogously, the supplies of phosphorus fertilizers reached a level of 876 tons of pure ingredient and exceeded the 1980 figure by 7 percent; there was a significant increase of fertilizer stocks in the magazines of "Peasant Self-Help" Community Cooperatives;

- good results in the production and supplies of agricultural herbicides and pesticides; the supply of these preparations was increased by 59 percent over 1980 and imported supplies increased by 73 percent, fully covering agricultural needs while, for the first time, there was a surplus of herbicides and fungicides over the number of orders for them placed by "Peasant Self-Help" and the Central Directorate of Gardening and Bee-Keeping Cooperatives the stocks of herbicides and pesticides were significantly increased both in trading and in production;

-- balancing the supply and demand in the production of wash powder, soap and toothpaste.

On the other hand, there were some negative phenomena such as:

- low use of existing production capacities;
- continuing too low efficiency of management;
- continuing depreciation of fixed assets.

## II. Plan for 1984

In the Central Annual Plan for 1984, the chemical and light industry has the following goals to realize:

1. The production and supply of principal products for agriculture, especially fertilizers, herbicides and pesticides, fodder additives, agricultural rope, rubber and felt-and-rubber shoes, agricultural foil, irrigation pipes, etc.;
2. improvement of consumer supply of basic industrial articles necessary to everyday life;
3. consumer supply of medicines and basic items of personal hygiene;
4. provision of necessary co-production supplies so that the planned increase in the production of finished products such as chemical fibers and other semifinished products can be attained;
5. increase in the supplies of chemical and light industry products to non-ministerial recipients; this mainly concerns rubber supplies and liquid fuels for transportation, lubricants and oils for the whole economy, lacquer products for various industries, especially the furniture, ship-building and automotive industries, synthetic substances for the machine and construction industries, conveyor belts and other products for mining, products for finishing home interiors (floor plates and linings, wall paneling) for the construction industry.

The realization of the goals places before the chemical and light industry the following important tasks to be accomplished this year:

In 1984, the production sold by the ministry should reach a figure of 1,741 billion zlotys. This is an increase of 104.2 percent over 1983. The chemical industry should exceed its 1983 sales by 610 billion zlotys (107.9 percent) and the fuel industry's sales should go up 353 billion zlotys (101.3 percent).

In 1984, the output of the most important chemical products specified in the Central Annual Plan should reach the following levels and growth rates in comparison with 1983:

	Units	Central Annual Plan for 1984	± 1984 1983
Crude oil products	thousand tons	14,282	104.7
Sulfur	thousand tons	5,000	100.9
Sodium hydroxide	thousand tons	570	139.8
Nitrogen fertilizers	thousand tons	1,370	104.7
P <sub>2</sub> O <sub>5</sub> phosphorus fertilizers	thousand tons	920	105.6
Polyethylene	thousand tons	135	104.3
Polypropylene and copolymers	thousand tons	58	101.4
Vinyl polychlorides and copolymers	thousand tons	238	217.3
Synthetic rubber	thousand tons	110.8	106.3
Chemical fibers	thousand tons	236	101.7
Pharmaceutical products	billion zlotys	39.6	112.8
Automobile tires	thousand units	3,700	116.8
Truck tires	thousand units	2,100	109.5
Tractor tires	thousand units	980	108.8
Agricultural tires	thousand units	680	95.9

Despite the fact that the 1984 plan projects a considerable growth in the level of production over 1983, the output of many products has been lower than the 1980 levels: crude oil products (1.8 million tons or 10 percent less), sulfur (200,000 tons and 4 percent less), chemical fibers (19,900 tons or 8 percent less), automobile tires (300,000 units or 8 percent less), truck tires (400,000 units or 6 percent less) and agricultural tires (24,000 units or 3 percent less).

The situation is chiefly the result of limited supplies, especially shortages of raw materials and materials imported from the second payments area, the poor technological state of many production installations and the lack of any possibility of strong and rapid improvement to the situation. Another cause of the comparatively lower output is overstaffing of posts involved in direct production work. The production tasks given the chemical industry this year are difficult but realistic. Their realization will require full mobilization of the workers and overcoming of many supply problems. The most important problems to be solved by the industry this year are:

-- the importation of a planned amount of crude oil from the second payments area and production of a necessary amount of gasoline, oils and lubricants for the national economy;

-- by the fourth quarter of this year, the start-up of the Olendra steam heating plant and conclusion of the second stage of construction of the Stalowa Wola electrical power plant so that it can provide hot water for the sulfur mine which is supposed to produce the sulfur called for in the Central Annual Plan;

-- proper modernization of many installations, especially those producing fertilizers;

--earlier start-up of the Wloclawek Nitrogen Works' new vinyl chloride plant;

-- steady production of non-priority products such as dye and lacquer components (government orders take up only one-third of the total production), perfume and cosmetic products, synthetic products and substances.

The chemical industry has been made responsible for the realization of one of four national operations programs, namely that of supplying the national health care system with pharmaceutical products, hygienic equipment and medical equipment. For this year, the program plans a 7.8 percent increase over last year in the value of the supplies of pharmaceutical and sanitary products. The chemical industry is also supposed to supply materials for the realization of the other three operations programs. In particular, this concerns supplies such as rubber, oils and lubricants, liquid fuels and lacquer products. It will be difficult to produce these supplies due to a lack of hard currency for the purchase of raw materials necessary to the production of the items above.

Despite the assumed 7.9-percent increase over 1983 of the value of sales by the chemical industry, the nation will continue to feel shortages in the following chemical industry products: gasoline, fuel oil, asphalt, rubber, conveyor belts, rubber hoses, rubber-and-metal products, polyester resins, lacquer products, cable polyvinyl chlorides, cosmetics, photochemical articles and synthetic materials such as polyethylene and polystyrene.

Depending upon type, the nation's tire needs are being 70-80 percent covered. The situation is similar with the production and supply of conveyor belts and high-pressure hoses.

The supply of rubber-and-metal products is also very low. There are serious shortages (about 60 percent) of polyester resins. Eighty-five percent of the minimal requirements for lacquer products is being met while 30-40 percent of the demand for photochemical articles is being satisfied. We are also having a very difficult problem supplying domestic consumers with polyethylene. The global demand supply is estimated to be 70 percent, but some consumers are barely receiving 20-30 percent of the needed polyethylene.

Only about 50 percent of the demand for polystyrene will be met. The supply of products such as cable polyvinyl chloride, cosmetics, pesticides, etc., will largely depend on whether or not the necessary raw materials, materials and equipment can be imported.

Special care must be taken to find new reserves in increasing production and economy to avoid depleting stocks of deficit materials, raw materials and finished products.

There is a burning need to find means of intensifying the production of a whole series of products not covered by central planning and balancing but nonetheless very important within our ministry. This includes products such as phenol, styrene, titanium white, phthalic acid anhydride, synthetic substance materials, rubber for light industry, caprolactam, technical rubber and rubber-and-metal articles, technological carbon, and plate glass. Very often, domestic production of these products can contribute much to limiting imports



from the second payments area and we now have many examples of this such as the use of domestically-produced lacquers in the leather industry, intensification of production of raw materials for polyurethane soles, the development of domestic production of lacquers for these soles, increased production of shoe glues, thermoplastic glues, zinc white and stearin. This has done much to limit expensive imports.

In its main role as a supplier of chemical products to the entire nation, the chemical industry also plays a great part in the flow of consumer goods to the marketplace and in export trade.

The value of chemical and fuel industry products planned to reach the market this year is about 290 billion zlotys, about 6 percent over the 1983 figure.

There is planned for 1984 a considerable growth in the supply of products such as table salt (41.1 percent), nitrogen fertilizers (5.1 percent), pharmaceutical products (15.2 percent), perfume and cosmetics (24 percent), pesticides (17.4 percent), rubber and cloth-and-rubber shoes (17.3 percent), laundry powders and granules (14.9 percent) and soap (16.5 percent). The planned supplies of cleaning agents, i.e., laundry powder and soap, as well as table salt should totally satisfy market needs.

The chemical and light industry has ambitious tasks to fulfill in the area of exports. Realization of the Central Annual Plan for 1984 requires an increase in overall exports sales to 193.3 billion zlotys (86.2 billion zlotys or 19 percent to the first payments area and 107.1 billion zlotys or 16.4 percent to the second payments area). This is a 17.6 percent increase in total exports over last year.

In order to implement these plans, our exports must grow faster than our overall production in the chemical industry and with a production increase of 7.9 percent, our exports must increase by 23 percent. The necessity of obtaining hard currency for imported materials needed for chemical production means that it will be necessary to find new ways of increasing both the volume and profits of export sales. This year's plan projects a significant increment in exports to the second payments area of products such as soda ash and heavy soda (10 percent), sodium hydroxide (171 percent), vinyl polychloride (40-fold), chemical fibers (210 percent), nitrogen fertilizers (100 percent) and phosphorus fertilizers (50 percent).

There will be considerable increases over 1983 of exports to the first payments area of products such as vinyl polychloride (66 percent), perfumes and cosmetics (48 percent), dyes (12 percent) and automobile tires (50 percent).

It is very crucial for us to eliminate selectively or restrict the export of highly unprofitable products and deficit products and to replace them with lucrative products. It is also necessary to find ways of improving the efficiency of export by increasing work productivity, making better use of production capacities, reducing production costs and improving the quality of export products.



An important element supporting exports this year is a system of government orders for 22 of the most important commercial export items. These orders amount to 28 percent of the total value of the ministry's exports.

The Central Annual Plan for 1984 plans a growth in overall investments for 8 central investments in the Ministry of Chemical and Light Industry from 14.7 billion zlotys in 1983 to 20 billion zlotys this year, despite the fact that overall nationwide investments are being reduced 2.8 percent from the 1983 figure.

Within this year's central investments by the ministry, the following plants should go into operation:

- at the Police Chemical Works, two ammonia lines with an output of 250 tons/year per unit;
- at the Wloclawek Nitrogen Works, a polyvinyl chloride and solvents plant with an output of 250,000 tons/year and 40,000 tons/year respectively;
- at the Tarchominski Polfa Pharmaceutical Plant, an increase in the production of antibiotics to 103.8 tons/year;
- at the Siarkopol Sulfur Mine and Processing Plant, an Olendra heating plant with an output of 86.5 Gcal/hour;
- at the Inowroclaw Salt Mines, a 50-percent increase in the output of the Mogilno salt spring to 2.5 million m<sup>3</sup>/year.

The realization of other investment work may be implemented through investment by the enterprises. The general trend of investment policy this year is to concentrate finances and resources on the realization of continuing investments, especially those planned for completion in 1984 or 1985, in order to achieve the quickest results and to limit excessive commitment to unfinished investment construction. An aid to enterprise investment is the policy of freeing enterprises from the payment of amortization to the state budget. This concerns the chemical and fertilizer industries, pesticide producers and the pharmacological industry. Furthermore, income tax deductions are applied for production and service investments made for the following reasons:

- to replace or limit imports;
- to start up or increase production by managing wastes, by-products and low-value materials;
- increase the production of machine spare parts;
- to protect the environment and create safe working conditions.

As a power-intensive industry, chemistry faces very difficult tasks in the area of fuel and power economy. In the 1983-1985 period, the chemical and

light industries will have to use about 1.7-2 million tons less of fuel and power than the planned production growth would indicate. This is a task to be dealt with by all services of enterprises, institutes, design bureaus and research-and-development centers. An important principle that will have a considerable influence on the realization of production tasks this year systematic efforts by enterprises to find new employees in cooperation with territorial state administrative organs and actions to limit cadre fluctuation and stabilize employment. It will also be necessary to improve the structure of employment in the plant administrations further, to create housing for workers in position crucial to the realization of the production tasks. This should be encouraged by incentive systems of pay aimed at increasing worker output, improving the quality of production, reducing costs and increasing the use of fixed assets.

#### Conclusion

In the first part, the article compares the economic results achieved in 1983 by the chemical and fuel industries against the background of the entire Ministry of Chemical and Light Industry with the figures for 1982 and the production of specific products with 1979. The second part of the article discusses the basic goals and tasks planned for 1984, the degree to which it is felt that production will meet public needs for the most important chemical products and certain problems needing attention this year.

#### Chemical Industry Reorganization

Warsaw CHEMIK in Polish No 6, Jun 84 pp 160-164

[Article by Teresa Burchard and Alina Wojciak: "Organization of the Ministry of Chemical and Light Industry"]

[Text] The principles for changes in Polish economic policy and the state's economic development strategy have made economic reform necessary and have dictated the need to introduce new methods into the existing system of management.

Under the conditions of economic reform, the primary organizational unit has become the enterprise based on principles of independence, self-management and self-financing. The principle of enterprise independence has had wide-ranging consequences in all areas of economic activity and has predetermined the direction to be taken by changes in organizational structures and functions of leading organs of state administration as well as the adjustments that they must make to the new conditions and demands.

Changes in the organization of central economic management became a reason for reduction of the number of sector-subsector ministries and the consolidation of certain others. Among the changes, there was a consolidation of the Ministry of Light Industry and the Ministry of Chemical Industry and the assumption of these new organization of responsibilities previously belonging

to other ministries (such as the Ministry of Construction and Construction Materials Industry's responsibility over glass and ceramic production or the authority of the chairman of the Main Committee for Physical Culture and Sport over the production of sports equipment).

The 3 July 1981 decree established the Ministry of Chemical and Light Industry. This change in organization outlined the authority of the new ministry over the amount and quality of production and the number of employees.

In the period preceding the consolidation of the two ministries within the new Ministry of Chemical Industry, there were 14 different departments:

-- the minister's cabinet and the following departments:

- cadre training;
- development and planning;
- foreign cooperation;
- trade maintenance;
- investments;
- military;
- economics and management;
- production and product turnover;
- accounting and monitoring;
- work output and social affairs;
- chemical safety and environmental protection;
- administration and management;
- technical progress.

These departments employed about 390 persons.

The Ministry of Light Industry contained 11 departments:

- planning and economic analysis;
- development and investment;
- coordination of production;
- economics and finance;

- work, pay and social affairs;
- materials management;
- foreign cooperation;
- administration;
- control;
- cadre training;
- military.

The ministry's central bureau employed about 341 persons.

There were 160 industrial enterprises, 41 product sales enterprises, 19 construction firms, 15 design bureaus and 33 other organizations active within the chemical industries ministry.

These organizations and enterprises were grouped into 11 industrial associations and two home trade centers acting on behalf of associations:

- the Petrochemia Association of Refinery and Petrochemical Industry;
- the Chemical Mining Association;
- the Nieorganika Association of Inorganic Chemical Industry;
- the Organika Association of Organic Chemical Industry;
- the Plastofarb Association of Substance and Dye Industry;
- the Polfa Association of Pharmaceutical Industry;
- the Pollena Association of Economic Chemical Industry;
- the Chemtex Association of Chemical Fiber Industry;
- the Stomil Association of Rubber Industry;
- the Metalchem Association of Chemical Apparatus Design;
- the Prochem Association for Modernization and Overhaul of Chemical Industry;
- the Petroleum Products Center;
- The Chemia Chemical Industry Trade Center.

The majority of associations had good scientific and research facilities in the form of institutes, research-and-development centers, design organizations and experimental production facilities. Foreign trade activity was handled by the Ciech Chemical Import-Export Center, which was an enterprise made up of many plants.

Furthermore, two organizational units operated within the chemical ministry: the Polish Chemical Reagents Industrial Trade Enterprise and the Polgaz Technological Gas Association.

Aside from the branch-operated research facilities, the chemical ministry had its own organization involved in research work, organization, work management and regulation, economics, cadre training and data processing. This work was done by the following organizations that were directly responsible to the Ministry of Chemical Industry:

- the Institute of Chemical Industry;
- the Ministerial Center for Organization and Regulation of Work in the Ministry of Chemical Industry;
- the Ministry of Chemical Industry Center for Improvement of Management Cadres and Professional Training;
- the Chomoautomatyka Ministry of Chemical Industry Center of Research and Development of Chemical Processes Automation;
- the Ministry of Chemical Industry Center for Chemical Industry Data Processing;
- the Etochem Ministry of Chemical Industry Experimental Production Center;
- the Institute of Chemical Industry Economics.

Within the Ministry of Light Industry, there were 329 industrial enterprises, 27 sales enterprises, 14 construction firms, four design bureaus and 30 other organizations. These were grouped into 10 industrial associations, the Association of Light Industry Construction Enterprises, two trade centers for turnover of means of production, acting on association rights.

As the key light industry, the fibers branch with its 214 enterprises has been organized into 7 associations:

- the Cotton Industry Association;
- the Polnoc Association of Wool Enterprises;
- the Poludnie Wool Industry Association;
- the Linen Industry Association;



- the Silk and Decoration Industry Association;
- the Felt and Technical Fabric Industry Association;
- the Knitting and Hosiery Industry Association.

Problems to be solved in this subsector were given over to specialist organizations such as the Fiber Institute, the Institute of Domestic Natural Fibers, the Fiber Industry Bureau of Study and Design, research and development centers, central laboratories and the Textilimpex Foreign Trade Association.

The remaining industrial enterprises were organized into:

- the Clothing Industry Association;
- the Leather Industry Association;
- the Technical Articles and Clothing Industry Association;
- the Association of Light Industry Construction Enterprises.

According to their production profile, the organizations grouped within these associations were also supported by their own research facilities such as the Institute of Leather Industry, the Leather Industry Design Bureau, the Protex Light Industry Technical Documentation Bureau, central laboratories, research and development centers, the Polbut Leather Industry Sales Enterprise, the Skorimpex Leather Industry Import-Export Center, etc.

Units for turnover of products were organized into two centers: the Center for Textile and Leather Raw Materials and the Technozbyt Center for Purchase of Technical Articles.

Aside from the activities mentioned, in individual enterprises within light industry, work has been carried out on the organization of production and administration, regulation, economics, data processing, scientific, technical and economic information and training.

These activities are conducted at centers such as:

- the Ekorno Center for Light Industry Organization Economics;
- the Ministerial Center for Scientific, Technical and Economic Information;
- the Dosko Center for Light Industry Cadre Training.

The ceramics and glass industry was organized into the Vitrocer Association of Glass and Ceramics Industry, which included 75 different organizations, such as:

- 15 domestic and technical glass works;

- 10 construction glass works;
- 11 container glass works;
- 16 table ceramics plants;
- 11 plate and sanitary products plants;
- 6 glass and ceramics machinery plants;
- 4 raw materials plants.

Research and design work for these enterprises is conducted at the Glass and Ceramics Institute and the Vitrocer Glass and Ceramics Industry Design Bureau.

The sport equipment industry included 17 production enterprises and a research and development center. These organizations were grouped within the Polsport Sport Equipment Industry Association.

The minister of chemical and light industry was given responsibility for the chemical industry, light industries, glass and ceramics industry and the sports equipment industry so that the new ministry could considerably increase its range of activities. The chemical and light industries became the most important suppliers to both the domestic and export markets.

The following affairs now come under the authority of the Ministry of Chemical and Light Industry:

- 1) chemical industry, especially the chemicals mining industry, including the mining of sulfur, inorganic chemistry, artificial fertilizers and chemical ingredients of chemical livestock feeds, organic chemistry, petrochemistry, artificial substances (including rubber), synthetic chemical fibers, chemical reagents for the dye and lacquer industries, domestic chemicals, perfumes and cosmetics, and chemical agents and products for various uses (including herbicides, pesticides, pharmaceutical products, synthetic products, rubber products, technological gases and chemical reagents);
- 2) refineries;
- 3) pipelines and the management of railway cistern tanks and other specialized means of transport;
- 4) the fiber industry, especially the production of cotton, wool, bast fibers, silk, decorative fabrics, haberdashery, knitting and hosiery, felt and technological fabrics, non-fabric products (production of fibers and yarns), specialized fabrics and fiber packaging;
- 5) the clothing industry;
- 6) the leather industry, especially tanning and tawing, shoe production, furs and leather clothing;

7) the sports equipment industry;

8) the glass industry, especially the production of technological glass, construction glass, glass for domestic use and glass containers;

9) the whiteware industry and especially the porcelain, porcelite, stoneware and faience industries;

10) overhaul, modernization and construction projects and the manufacture of special machinery, equipment, instrumentation and clothing for the above-mentioned industries.

The Ministry of Chemical and Light Industry is responsible for tasks such as:

- analysis of economic processes of its own activities and the development of development programs and long-term studies;

- participating in the development of nationwide social and economic planning;

- assessing the economic and social effectiveness of its subordinate enterprises and taking action to increase efficiency;

- participating in the forming and improvement of economic and financing systems that serve to control the activities of the ministry's enterprises and create appropriate cooperative bonds;

- creating conditions allowing the improvement of administrative and operative organization in ministry enterprises and other such organizations;

- conduct long-term studies on cooperative work and foreign economic exchanges;

- balancing needs in the development of particular areas within its own area of authority relative to those of the general national economy;

- establishing trends within the political cadre, training and assessing the management cadre, etc.

The organizational structure of the administration of the Ministry of Chemical and Light Industry and the size of its work force has been adapted to its new role.

The Ministry of Chemical and Light Industry contains 15 departments and 2 problem study sections, as listed below:

- the ministry and department cabinets:

  - cadres and training;

  - regulation and supervision;

- defense affairs;
- economics;
- legal organization;
- wage and social affairs;
- development;
- science and technology;
- market production and planning;
- production and supply coordination;
- realization of investments and overhauls;
- work safety and environmental protection;
- foreign cooperation;
- administration;
- section on coordination of problems;
- fuel and power section.

Furthermore, a council of directors was established to function as an advisory organ to the minister and the ministerial collegium.

The Ministry of Chemical and Light Industry directs its activities with the help of six undersecretaries of state and a ministry working group, initially reduced about 50 percent in size in relation to the previous state of employment. In 1983, the size of the work force in the ministry's central administration was increased by about 100 persons. This increase was made necessary by the introduction of increased supervision and regulation of enterprise activities. The annual average size of the work force in the central administration is about 500 persons. It is expected that the future role of the founding organs in the direction of industry will be enhanced by the improvement of management system, through the use of supervisory councils established in article 33 of the 25 September 1981 law on state enterprises.

The purpose of supervision by the supervisory councils is to insure that the activities of the ministry's enterprises are carried out in accordance with law and the state's fundamental policy.

Under the economic reform, it has become necessary to give up previous principles of centralized schematic administrative management of the economy and the former three-tiered system of ministry-association-enterprise management has become inadequate to the principles of reform.

A fundamental step aimed at creating conditions that foster independent and effective activity by enterprises was the abolition of associations, the indirect link between the enterprise and the ministry. This was introduced in the 30 November 1981 Council of Ministers Decree No 242 on the principles, course and deadlines for the abolition of associations of state enterprises (MONITOR POLSKI No 32, 1981, art. 286). In the Ministry of Chemical and Light Industry, associations had already practically ceased to function by the beginning of 1982. Only the Petroleum Products Center acting in advance on association rights was transformed into a multi-plant utilities enterprise.

The Ministry of Chemical and Light Industry was compelled to take over these functions of associations because they were so beneficial to the national economy.

[see table on following page]



Sector	P	B	N	R	H	T	I	Razem (30)
1. Bawelniana	32	-	1	-	-	-	-	33
2. Welniana	51	-	2	-	-	-	-	53
3. Lniarska	30	-	2	6	-	1	-	39
4. Jedwabniczo-dekoracyjna	27	1	1	-	-	-	-	29
5. Filcowa i tkanin technicznych	25	-	1	-	-	-	-	26
6. Dziewiarsko-ponczosznica	51	-	1	-	1	-	-	53
7. Odzieżowa	46	-	1	-	3	-	-	50
8. Skorzana	45	1	3	-	1	-	-	50
9. Art. technicznych i galanteryjnych	30	1	1	-	-	-	-	32
10. Budowlano-montazowa przem lekkiego	-	15	-	-	-	1	-	16
11. Zbytu art. technicznych	-	-	-	-	6	-	-	6
12. Obrotu sur. wlok. i skorz	-	-	-	-	17	-	-	17
13. Rafieneryjna i petrochemiczna	16	5	3	-	2	-	1	27
14. Kopalnictwa sur. chemicznych	13	1	2	-	1	-	1	18
15. Organiczna	14	1	2	-	1	-	-	18
16. Nieorganiczna	17	2	1	-	1	-	-	21
17. Tworzyw i farb	29	2	1	-	1	-	1	34
18. Włókien chemicznych	9	2	1	-	-	-	-	12
19. Chemii gospodarczej	22	2	-	-	1	-	-	25
20. Farmaceutyczna	16	1	1	-	-	-	1	19
21. Gumowa	15	1	2	-	1	-	-	19
22. "Metalchem"	13	1	1	-	-	-	-	15
23. Modernizacji przem. chemicznego	1	14	-	-	-	-	-	15
24. Handlowa przemysłu chemicznego	-	-	-	-	17	-	-	17
25. Gazow technicznych	1	-	-	-	-	-	-	1
26. Paliw płynnych	-	2	-	-	1	1	-	4
27. Sprzętu sportowo-turystycznego	16	-	-	-	-	-	-	16
28. Szklarsko-ceramiczna	70	4	1	-	-	-	-	75
29. Jednostki różne	-	1	4	-	1	-	9	15
30. Razem	589	57	32	6	55	3	13	755

Table 1. The number of unit enterprises operating within the Ministry of Chemical and Light Industry.

Key: 1. cotton	11. sale of technical articles
2. wool	12. fiber and leather materials
3. linen	13. refineries and petrochemistry
4. decorative silk	14. chemical mining
5. felt and technological fabrics	15. organic chemistry
6. knitting and hosiery	16. inorganic chemistry
7. clothing	17. synthetic substances and dyes
8. leather	18. chemical fibers
9. technical articles and clothing	19. consumer chemicals
10. light industry	20. pharmaceuticals

(Con't)

21. rubber
22. Metalchem
23. chemical industry modernization
24. chemical industry commerce
25. technological gases
26. liquid fuels
27. sports and tourist equipment
28. glass and ceramics
29. other units
30. total; P-industry, B-construction, N-science, R-agriculture, H-commerce, T-transport, I-others.

In accordance with the 25 September 1981 law on state enterprises, enterprises (grouped within associations) became totally independent, self-managing and self-financing economic units.

The Ministry of Chemical and Light Industry is a founding organ for 755 enterprises and other organizational units operating within this ministry. Table 1 shows the numbers of units operating within this ministry according to their sector and subsector of the national economy.

The authority of the ministry over enterprises consists of ensuring their correct activity and realization of their tasks.

As we have already said, the introduction of economic reform created new conditions for effective action by enterprises and realization of constitutional principles of worker participation in management. Organs of the enterprises make independent decisions on all plant affairs within limits set by law. Enterprises with common goals and means of better implementing their assigned tasks may form voluntary associations. In the Ministry of Chemical and Light Industry, enterprises have recognized the value of forming associations and the first voluntary associations were formed in the first 6 months of 1982.

As of 1 January 1984, there were 28 voluntary associations active within the ministry:

1. Association of Synthetic Chemicals and Oil Refinery Enterprises;
2. Merinex Association of Wool Product Manufacturers;
3. Association of Cotton Product Manufacturers;
4. Association of Decorative Silk Product Manufacturers;
5. Metalchem Association of Chemical Apparatus, Machinery and Equipment Manufacturers;
6. Metex Association of Replaceable Elements and Equipment Manufacturers;

7. Stomil Association of Rubber Industry Enterprises;
8. Association of Clothing Manufacturers;
9. Bielska Welna Association of Wool and Clothing Industry Enterprises;
10. Tricot Association of Knitting and Hosiery Enterprises;
11. Association of Glass and Ceramic Manufacturers;
12. Association of Leather Industry Enterprises;
13. Polski Len Association of Linen Industry Enterprises;
14. Association of Glass Industry Enterprises;
15. Polsport Association of Sport and Tourism Equipment Manufacturers;
16. Organika Association of Organic Chemistry Industry Enterprises;
17. Polifarb Association of Dye and Lacquer Manufacturers;
18. Chemia Association of Chemical Commerce Enterprises;
19. Nieorganika Association of Inorganic Chemistry Industry Enterprises;
20. Association of Chemical and Light Industry Construction Enterprises;
21. Pollena Association of Domestic Chemical Manufacturers;
22. Modernchem Association of Chemical and Light Industry Modernization and Repair Enterprises;
23. Association of Fiber Technical Product Enterprises;
24. Galtech Association of Technical Clothing Manufacturers;
25. Association of Ceramics Manufacturers;
26. Technozbyt Association of Technical Article Sales Enterprises;
27. Chemitex Association of Chemical Fiber and Technological Resources Manufacturers;
28. Association of Synthetic Fibers Manufacturers and Producers.

The majority of these are associations of enterprises within a given subsector. It must be pointed out that in certain cases, enterprises have seen the need to join more than one association (for example, enterprises from the knitting and clothing industries are also members of the Association of Wool Products

Manufacturers). On the other hand, the Association of Synthetic Fibers Manufacturers and Producers includes about 22 enterprises that are both producing or about to start producing their own synthetic fiber products. Within this association, there are synthetic fibers industry enterprises as well as wool, cotton, decorative silk, knitting and hosiery, linen and even sports equipment enterprises.

Above all, the goals of these voluntary associations are:

- to create conditions under which their member enterprises can achieve the best economic results and most fully meet public needs;
- to protect the interests of the member enterprises;
- to help meet the current needs of members.

The basic tasks of the associations are:

- to organize the supply of raw materials and materials, coordinate production and the sale of products;
- to organize cooperation and interaction between member enterprises for the realization of common goals;
- to administer funds rationally and to organize the activities of common service units.

Furthermore, the Ministry of Chemical and Light Industry has recognized the social and economic need to create five obligatory associations:

- ERG Association of Defense and Synthetic Substance Industry Enterprises;
- Polfa Association of Pharmaceutical Industry Enterprises;
- Association of Fiber and Leather Raw Materials Exchange Enterprises;
- Association of Chemical and Mineral Mining Enterprises;
- Association of Manufacturers of Technical Clothing and Equipment.

Two associations have also received the status of defense industry associations.

The purpose of obligatory associations is to coordinate the activities of their member enterprises in the area of realization of important economic tasks and government programs. The obligatory tasks of these associations are:

- to initiate development of member enterprises;
- to balance needs and to establish the size of production;

- to organize raw material and material supplies;
- to gather and store material reserves;
- to organize a system of price equalization, etc.

Presently, the Ministry of Chemical and Light Industry has 33 associations, both voluntary and obligatory.

In 1984, the ministry had to realize the two operations programs below:

- to provide the national health service with pharmaceutical and sanitary products and medicinal equipment;
- to provide consumer clothing and hosiery products for children and youth up to 15 years of age.

In connection with these demands, a ministry plenipotentiary for these tasks will be needed.

The structural organization of the ministry is completed by the Bureau of the Ministry Plenipotentiary for Government Orders, which has been entrusted by the ministry with the authority and duties of a founding organ for government orders of raw materials and materials as well as products covered by the Central Annual Plan excluding 1984 investments realized on the basis of government orders.

The structure described above is not fixed in nature and is subject to change. We should expect that, first of all, there will be an improvement of the internal organization of enterprises. At the same time, there may be some reorganization of the ministry's scientific and research units. The existing organizational structures of the associations also need to be improved.

#### Conclusion

This article has briefly discussed the organization of the ministries of chemical and light industry and the organization of the consolidated Ministry of Chemical and Light Industry.

The second part of the article discusses the organization of the ministry and minister's administrative bureau in order to aid the reader in making eventual contacts with the founding organ.

12261

CSO: 2600/1096



## FARMERS DISCUSS PRODUCTION PROBLEMS AT MEETING

Warsaw GROMADA-ROLNIK POLSKI in Polish 26 Jun 84 pp 7, 9

[Article by Jan Szymonek: "Discussion at a Farmers' Circle Gathering"]

[Text] How did it proceed and what were its topics? First, it must be said that it was wide-ranging and that all that was said could not have been written on the proverbial oxhide. Second, the discussion was not polished, since even those delegates whose speeches had been prepared would break out of the written format and ad lib without reading. The discussion was a responsible one, for nothing was criticized for its own sake (except for antifarmer comments made by some scientific types), and each speech was ended by conclusions.

As for the atmosphere in the meeting hall, the best indicator was the fact that one of the discussion leaders was replaced during the second day of discussions by motion from the floor.

All matters of importance to the nation and village were discussed, but matters that concerned production predominated. There is nothing strange in that since production is the farmer's mainstay, his daily bread.

The discussion report starts with a speech by Leszek Zwierz of Chełm Province.

The speaker mentioned that the region was poorly supplied in the things needed for production, as well as the unfair distribution of these items. This resulted in slower utilization of the farming resources reserves that exist in the region. He added that the technical items needed for farming are getting more expensive while their quality is declining. The farmers are not really interested in higher prices, but in keeping the prices for supplies necessary for production at a reasonable level rather than changing every few weeks.

"The farmer is in a forced situation," said Feliks Kijak from Gozów Province. "He has to sell his products at a fixed price, while buying supplies at negotiated prices." Władysław Maciejewski, Leszno Province, added, "Some of those prices are highway robbery." "Prices for crops should be structured so that the farmer has an idea of what is to come in the future years," said Jan Kopycki, Łódź Province, "and would not have to wait each year to see which crops are profitable and which are not."

"Farming is not industry," said Antoni Mackiewicz of Olsztyn Province. "If a farmer screws up in the spring, then at harvest time he has no reason to go into the field with a scythe. In the farmer's factory one can't make up for losses and bad judgment."

Wladyslawa Siemianek from Pila Province simply stated that her task in the case of farm equipment prices should not encompass the three S's, but the three R's--accounting, reason, and work [rachunek, rozsadek, robota]. Solid work, of course.

The delivery of the means of production to the farmer is very important, but is not everything. Even getting supplies to farmers does not solve the situation when the farmland is flooded and drainage work is behind schedule. Supplying dry feed to stock does not automatically increase its numbers. Water for irrigation, for people and animals was the topic of the second speech.

"How can one think about increasing production," asks Stefan Lisiecki from Kalisz Province, "when we have water delivery systems in 125 villages, but we have 12,500 farms which must truck in water? In terms of drainage we are in a leading position in the nation, but what of that when a significant portion of the drainage systems dates back to the 1930's and their state of repair is worse than bad?"

"In our province," stated Mieczyslaw Filipowski of Plock Province, "108,000 hectares are waiting for drainage work, while 43,000 hectares have drainage systems that are in need of maintenance work. We install drainage for 2,500 hectares annually. It is easy to compute that at that rate the backlog will take 50 years to complete! For the 53,000 farms only 4,000 have water delivery systems."

The delegates proposed in their conclusions that the problems of drainage and water supply be treated in the same way as rural electrification once was. The villages, for example, are willing to undertake the work on water systems as a voluntary project, but sufficient materials are not available. The circle is closing....

The soil in the possession of farmers, in spite of constitutional guarantees and laws that protect the land, is still in danger, from industry, among other things. Stanislaw Przylucki from the Katowice Province, and others, spoke of this.

Farming in Silesia is ranked 20th from the standpoint of size, but from the production standpoint it is 10th in the nation. The land is being devastated by pollution, which is at a high level. Industry is consuming land at a rate of 800-900 hectares a year.

Other delegates also spoke on these subjects. They mentioned land prices, credits for its purchase, the improper administration of the land by gmina offices, and the disregard of the opinions voiced by the farm groups that know best who in the village should be sold land.

Since we are talking about the soil, we should recall the speech by Boleslaw Gedek, delegate from Lublin Province, who called attention to the fact that often provinces are allocated production resources on the basis of the conversion hectare. Would it not be better to take into consideration the number of persons that are to be fed in the region of each actual hectare? In Lublin Province 100 hectares feeds 86 people, while in Torun, Leszno, and Bydgoszcz provinces it ranges from 66 to 70.

After all, the soil quality differs from region to region. The inhabitants of the foothill and mountain regions know this best. There were representatives from these regions at the gathering, among them Wladyslaw Witek from Jelenia Gora Province. He spoke about the higher expenses involved in producing in those regions as compared to the lowlands, while accommodations and assistance, including equipment, are still not forthcoming in spite of promises and assurances.

Farm production requires not only the farmer's effort but also assistance from others, including the SKR [Agricultural Circles Cooperative]. The assessment of these units, as expressed by the delegates, was quite good, but there was no lack of specific criticisms. More, however, was said about the difficulties experienced by the units, the low pay, the diversion of funds earned from services rendered by the units to FAZ [Vocational Activation Fund] and the debts incurred by the units during the bygone period of "joyful creativity."

"We do not want the debts of the SKR," said Antoni Mackiewicz from Opole Province. "The farmers should not be made to repay these billions because it was not their fault. We did not want these investments, we did not make the decisions, and we farmers will not pay for the debt. It should be cancelled."

Women constituted only 20 percent of the delegates, but they had their say during the plenary discussions. They spoke of the difficult work done by the farm wife and mother, about the fact that farm mechanization has not made housework any easier, since it yet has to be mechanized. Delegate Ewa Jankowiak, Gdansk Province, stated that when it comes to running water on the farm, for some farms it will be a reality only for the fifth generation, while the farm child is neglected and treated worse than the city child.

"Why," asked the delegate, "when one looks at the village and its women, are they seen only as a source of farm labor? Why is the farmer treated as an intruder at the various administrative offices? After all, most often our own children work in those offices. Is that their way of avenging their unfortunate childhood?"

Water, gas, culture, rest and recreation were the chief themes in the speeches of the greater part of the delegates. Sabina Kozinska from Kielce Province mentioned that it was difficult to be active in a region with scattered farm holdings, since often the people are poorer and many hold down a second job, and then all the farm work rests on the woman's shoulders. In spite of

this there are 81 active performing art groups in the region. There are contests whose purpose is to cultivate old customs. Care is taken to develop a network of libraries and expand their collections of books. "In short, for us, the KGW [Water Supply Committee] is a real school of life," the delegate said.

This was a gathering of farmers' circles, so the subjects which surfaced often concerned the circles and their associations. Czeslaw Trupek from Krakow Province reported to the gathering that the tasks which concerned organizational matters and resulted from the law pertinent to socioprofessional organizations for farmers have been accomplished. The network of units has grown and gained strength, but to accomplish the tasks that have fallen on the shoulders of these organizations one meeting a year will no longer be sufficient. There must be constant systematic contact, experience sharing, and schooling.

"Our organizational links," said Jan Murawski of Lomza Province, "must participate in all the village needs. The opinions, which we present centrally here, must be the sum of opinions from all our links. We must act with a feeling for political realism and know what can be done today and what must be postponed. We must remember, however, that the KR [farmers' circles] must not be treated as a cure-all for all the farmer's woes. We must first fulfill our organizational duties and only then can we make demands on others."

"For generations we have known that only in unity is there strength," said Jerzy Jurkiewicz of Ciechanow Province. "In the village we are not acting alone, we have other organizations, in this unions and branch associations. All defend the farmer, but how is it that each link has a differing opinion on one matter. It is worthwhile to add," said the delegate, "that the deadlines set for various consultations are too short to be met by the circle organizations."

There were appeals for unity, for forming something resembling a federation. There were promptings for the new KZRKiOR [Agricultural Circles, Unions of Farmers and Agricultural Organizations] administration to take a more aggressive stance on behalf the farmers. "There was a time," said one delegate, "when farmers had their mouths closed and bolted shut. Not without cause we were compared to fish. Now we too have a voice, and we must take advantage of it."

What disturbed the delegates most during the gathering? Two things: the unfair opinions about farmers and farming put forward, among others, by Docent P., and the announcement of a coming increase in the price of spare parts for Ursus tractors. This second matter was explained by Stanislaw Zieba in his speech. He informed all that a special investigative commission has been formed to determine the actual costs of producing replacement parts.

As for the "farmer-eaters," as the "theoreticians" were called by the Olaszyn Province delegate, I do not have to mention them since the stance of our

publication is univocal on this matter and is well known to the readership. However, it is worthwhile to mention some of the comments made by the delegates.

"It is an idiotic notion to say that if the farmers get poorer they will produce more and at a lower cost," said the Leszno Province delegate. "We already know why Minister Krasinski has such a dislike for farmers. Little wonder that Docent P. is his advisor." "They are tarred with the same brush...", said the Olsztyn Province delegate. "We appeal to the highest administration to resist the various 'pseudo-scientists,'" said the delegate from Piotrkow Province.

"Those who say that hens will lay golden eggs should be given credits and some chicken feed. Let them lay a few of these golden eggs, perhaps they will earn enough to pay the interest on our debts," said the Wroclaw Province delegate. "Those who are constantly checking the contents of the farmer's pocket should be advised to look deeper, into his heart; there they will find the farmer's patriotism," said the Elblag Province delegate.

"Stanczyk [the court fool] in King Zygmunt's time said that in Poland we had too many doctors," said the Koszalin Province delegate. "This certainly is true, for today we seem to have too many 'doctors' healing the village and farming. We don't need diagnosis, but more resources for production, machines, building and other materials, and a decent, honest income as we deserve..."

The voice of the "farmer-eaters" was represented by another female delegate, but one need not worry, because the farm policies are clearly defined and General Jaruzelski assured all at the joint plenum of the PZPR Central Committee and the Chief Committee of the ZSL that the decisions of this important forum will be executed fully and consistently to the end.

We are seeing to it that this does indeed happen.

12411  
CSO: 2600/1082



## BLOC CONFERENCE ON DOMESTIC TRADE HELD IN ROMANIA

Bucharest COMERTUL MODERN in Romanian No 3, May-Jun 84 pp 1-3

[Text] On the initiative of the Ministry of Domestic Trade, agreed upon unanimously by the participants in the 14th session of the meeting of ministers of domestic trade of the CEMA member countries, the Institute of the Economics of Domestic Trade and Tourism—with the direct aid of the Ministry of Domestic Trade and the Central Institute for Economic Research—organized the Bucharest scientific meeting with international participation, with the subject being "The Increase in the Contribution of Scientific Research to the Development and Improvement in the Activity of Domestic Trade and Services."

Prestigious researchers from these units in Romania and the People's Republic of Bulgaria, the Socialist Republic of Czechoslovakia, the Republic of Cuba, the GDR, the People's Republic of Poland, the People's Republic of Hungary and the USSR, university professors from the Academy of Economic Studies in Bucharest, leadership cadres and highly-qualified specialists in domestic trade and services responded to the organizers' invitation with pleasure and special interest.

The work of the meeting took place on 25-26 April 1984 in the very hospitable atmosphere of the Hanul lui Manuc Hotel and restaurant complex in Romania's beautiful capital.

In a holiday atmosphere of respect and high appreciation for Romanian commercial research, which has existed for more than a half-century, but also in a climate of scientific uprightness, the meeting participants achieved a broad and productive exchange of ideas and opinions, sharing the experience gained throughout the years in scientific research on the complex problems of development of domestic trade and services in the socialist countries.

On the basis of the registration requests from Romania and abroad, the program for the meeting included 37 scientific reports, of which 13 belonged to the foreign guests and 24 to authors from Romania.

The work of the scientific meeting began on the morning of 25 April in the festively decorated hall of the Hanul lui Manuc complex with the opening speech delivered by Constantin Iurea, deputy minister of domestic trade, who addressed warm greetings to the organizers and welcomed all the participants in this prestigious scientific demonstration on behalf of the Ministry of

Domestic Trade Leadership, and actually all those who are taking action in each socialist country to increase the contribution of research to having commercial activity and services take place under better and better conditions. Presenting a comprehensive picture for the horizon of the achievements of Romanian domestic trade in the years of socialism, particularly the period following the 9th party congress, the speaker strikingly brought out the contribution of our scientific research to solving the complex problems of commercial activity more and more efficiently as the direct result of the competent and passionate work of the collective of researchers at the Institute of the Economics of Domestic Trade and Tourism (IECT), the higher education cadres and specialists in the central and territorial apparatus, cadres in the retail and wholesale trade enterprises and public food service. In the final portion of his report, Constantin Iures presented a number of central reference points for the future evolution of Romanian trade, expressing the need for achieving a new quality of work in commercial research, which would permit increasing its contribution to the development and improvement of domestic trade and services.

Bringing the greetings of the leaders of the Central Institute for Economic Research (ICE) and all the researchers carrying out their activity in this institute, university professor Dr. Barbu Gh. Petrescu--ICE director general--presented to the meeting's participants a broad picture of Romanian economic research, of the multiple and complex problems for the optimum solution of which they must make a bigger and bigger contribution. Basically, the speaker pointed out, we need to promote synergistic thinking in economic research, in which the research of domestic trade, tourism and services has gained a fully deserved place of honor, and a broad and long-range view, closely connected with the needs of the economy, one that is deeply involved in social practice, of the specific nature of economic processes and phenomena.

After having the credits of the scientific meeting in Bucharest, the report made by Dr. Virgil Mănușelitel--IECT director--offered the participants the opportunity to learn about everything that is basic--both present and future--to the scientific research of domestic trade and services in socialist Romania. Informally, referring to the major goals and priority directions of scientific research in domestic trade and services in Romania, the author, among other things, stressed the important role being given to promoting pluridisciplinary research--joint conditions of the superior integration of research activity with production and production, as well as the development and improvement of collaboration with similar research units in the other CEMA member countries.

Then, in the series of reports in the cycle entitled "Current Requirements and Long-Range Factors in the Development of Scientific Research in Domestic Trade and Services for the Population," university professor Dr. Tadeusz Szlucky, director of the Warsaw Institute for the Domestic Market and Consumption, after warmly extended greetings from researchers in our friendly country, presented his report entitled "Scientific Research in the Process of Improving Domestic Trade--Goods and Services." Placing the subject treated in the context of the current problems of the Polish economy, involved in a broad process of realizing the economic reform initiated in 1981, the author competently and clearly stressed the main aspects of the directions of research, organization of it and utilization of the research results, now being directed on a priority basis toward substantiating new decisions on the future operation of the market in Poland.

With the subject of the report by Dr Constantin Tudose, director in Romania's Ministry of Domestic Trade being the presentation of some overall considerations on "The Current and Future Coordinates for the Development, Organization and Presentation of the Network of Socialist Trade in Romania," the author, among other things, referred to the important role of scientific research in the complex process of continually modernizing trade in Romania with regard to the stock of goods, commercial network and training of the worker personnel.

In the report entitled "Current Requirements for the Development of Scientific Research in Domestic Trade in Hungary," Dr Gabor Engel, deputy director of the Research Institute for Domestic Trade in Budapest, presented a number of valuable considerations with regard to theory and practice on the place and role of this research in providing the scientific base needed to substantiate the decisions on the development of commercial activity in the context of the concerns of the neighboring country with improving the economic reform begun in 1968.

The report entitled "The Present and Future of Research in the Area of Domestic Trade and Management Services in the People's Republic of Bulgaria," worked out and presented by Dr Dimitar Panajotov, head of a laboratory at the Scientific Center for Domestic Trade, Services and Local Industry in Sofia, kept the audience's attention with the characterization of the particular features of this type of scientific research in the country neighboring on the Danube.

Proposing to present a comprehensive overall picture of current and future concerns of Romanian scientific research in the area of services, Dr. Aurel Vainer, head of a sector, and Cristian Zimniceanu, scientific researcher at the IECIL, presented the report entitled "Research in the Area of Services for the Population in the Socialist Republic of Romania--Results and Directions for Future Development."

In continuation, presented at the meeting were reports entitled "Considerations on the Relationship between Supply and Demand for Services of Scientific Research" as worked out by university professor Dr Constantin Florescu of the Faculty of Trade in Bucharest and "Contributions to Increasing the Degree of Utilization of the Scientific Research Potential in the Area of Domestic Trade and Providing of Services," by university lecturer Dr Dumitru Patrache.

The group of reports on the subject of scientific research as a factor of progress in carrying out social-economic functions of the basic units in trade and services (approached at the microeconomic level) was opened by Dr Peter Ruffman, deputy director at the Center for Economic Research for Domestic Trade in Berlin, who presented the report entitled "The Contribution of the Center for Economic Research for Domestic Trade in Intensifying Trade and Services Activity in the GDR." Then following were reports given by university lecturer Dr Vasile Mercioiu, head of a chair at the Faculty of Trade in Bucharest, entitled "New Guidelines in Carrying Out Social-Economic Functions of the Commercial Enterprises" and by Dr Tamas Kuthy, deputy director at the Institute for Organization of Trade in Budapest, entitled "The Dialectical Development of Commercial Enterprises and Their Centrais in the People's Republic of Hungary."

The third group of reports, worked out by Dr Zoia Belova, deputy director at the Moscow Institute of Scientific Research in the Area of Household Services for the Population; Dr Eng Iana Berova, scientific researcher at the Institute for Commercial Research in Prague; Ilie Marmandiu, main scientific researcher, degree I, and Victor Nicolae, main scientific researcher at the IECIT; Dr Natalia M. Malei, head of a sector at Moscow's Central Institute of Scientific Research in the Area of Household Services for the Population, treated various theoretical and methodological aspects referring to the utilization of the analysis and prognosis of the trends and changes in the system of usages and the population's demand for substantiating the future development of production, domestic trade and services.

Opening the series of reports programmed for the second day of the meeting, university professor Dr Laszlo Szabo, director of the Institute for Market Research in Budapest and a prestigious international personality in the area of marketing, gave the report entitled "A Study of the Market for New Products," based on the results and concerns of researchers from the institute he heads. Then the following reports were presented: "Some Experiments of Applying Scientific Research on the Cuban Market," whose authors were Rodolfo Real Perez and Carlos Perez Falques, scientific researchers at the Institute for Study of the Domestic Market of Havana and "Research into the Social Problems of Providing Services in Hungary," a report by the main scientific researcher Istvan Covacs, of the Budapest Research Institute for Providing of Services.

Also deserving attention were the reports given by Prof Dr Mihai C. Demetrescu, Dr Dima Lupu and Vasile Bogdan, Dr Victoria Stefanescu and Dr Nicolae Teodorescu, Prof Dr Eugen Barat, Prof Dr Petre Baetoni, lecturer Dr Iacob Catoiu, Ana Lucia Ristea, Dr Vasile Neagu and others.

In closing the work of this prestigious scientific meeting with international participation, the leadership of the Ministry of Domestic Trade and the Institute for the Economics of Domestic Trade and tourism addressed warm thanks and wishes of success to all the participants, at the same time expressing their conviction that the scientific event of 25-26 April in Bucharest was among the important reference points in increasing the contribution of research to the development and improvement of domestic trade and services activity and to intensifying the fruitful exchange of experience among researchers in the friendly socialist countries.

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CSO: 2700/242

## STATUS OF PROJECTS IN DEVELOPING UNDEVELOPED AREAS

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 27 Jul 84 p 4

[Text] The mandatory loan by all basic organizations of associated labor—1.86 percent of the social product of the socialized sector of the Yugoslav economy—and the pooling of labor and capital are the sources of capital to build many projects in the economy. All of those funds flow into the Federal Fund for Financing the Faster Development of the Economically Underdeveloped Regions. All the investment projects which the fund finances from these two sources of capital have the same purpose: construction of new plants to employ more rapidly the able-bodied population and to create new accumulation for the economy's further development.

Although they are well known, this is an occasion to mention certain other facts. Half of the capital with which the fund finances the development of the underdeveloped comes from the mandatory loan. The other half also comes from organizations of associated labor, but in this case it is concentrated through pooling, through self-management procedures, the basis of which is, of course, an interest in realizing larger income, the need for cooperation, the use of natural resources, the supply of raw materials and the like. The motivation of the pooling is always a material interest on the part of those who are investing their available accumulation in order to create conditions for realizing the larger income.

The effects have even broader importance. Both the lendings of the resources of the mandatory loan and much more the pooling of labor and capital of the advanced with the underdeveloped in order to build economic projects in economically backward regions are creating a better-balanced economic structure in the country and are solving more successfully the problems of scarce raw materials and production supplies. Often pooling on a self-management basis yields many finished products to meet the needs of the domestic market as well as for export.

It is superfluous to emphasize the importance for both the underdeveloped and the developed that the money be collected on time, from both sources, of course. Optimum investments for terms that are short are also very important for stable conditions of the country as a whole.



According to a report by the fund, the resources of the mandatory loan, as in the past, are by and large flowing in regularly once again this year. The advance against the obligation of the republics and provinces, by decision of the fund's assembly, amounts to 41,993.5 million dinars for all of 1984. Over 4 months, January-April, that obligation was 13,997.6 million dinars plus 3,435.9 million dinars of obligations from previous years which have come due. The obligations of the republics and provinces were met at a level of 103.4 percent--the 4-month advances were met at a level of 88.5 percent and obligations which had not been met in previous years were met at a level of 115.6 percent.

The available capital in the period January-May of this year amounted to 32,267.2 million dinars. By the beginning of June the economically underdeveloped republics and Province of Kosovo had received 30,540.3 million dinars. The capital was loaned through authorized banks of the economically underdeveloped republics and Province of Kosovo, envisaged by the Law on Distribution of the Permanent Resources of the Fund. These resources are in the place where they will be invested in the course of this year according to programs, nor is there any reason for it to be otherwise. These funds are, of course, the initial funds, since the investors are also investing their own capital or according to the conditions prescribed by the fund.

By contrast with the funds of the mandatory loan, which are paid into the fund every month, and every month the fund passes them on to the underdeveloped, the pooled capital is loaned virtually throughout the entire year. For that reason it is never very simple to present a balance of the pooled capital, even for past months. However, the self-management accords which have been concluded indicate at least approximately the periodical balances of pooled capital which has been loaned.

In the first 4 months of this year, January-April, 21 programs were adopted--the largest number in Kosovo (9), and then in Bosnia-Herzegovina (7), Macedonia (4) and Montenegro (1). The accords concluded call for building 13 economic projects with an estimated cost of 4,949.8 million dinars, including 1,918 million dinars of capital from the fund. Investments in reconstruction and modernization of 7 projects will amount to 3,175.4 million dinars (the fund's pooled capital amounts to 787.6 million dinars). According to the accord among those interested, 32.7 million dinars (10.5 million dinars of the pooled capital of the fund) will be spent for cost overruns on one project in Bosnia-Herzegovina.

As we have already said, in the first 4 months 9 self-management accords were concluded in SAP [Socialist Autonomous Province] Kosovo for a total estimated cost of 5,816 million dinars. Its share of the fund in these investment projects is 2,073.1 million dinars. All but one of these capacities will be hiring new workers, 1,546 in all. There will be 8 new economic projects built with an estimated cost of 4,295 million dinars, and the share of the fund's pooled capital will be 1,723.1 million dinars. One project with an estimated cost of 1,521 million dinars (pooled capital of the fund 350 million dinars) consists of reconstruction and modernization.

In Bosnia-Hercegovina 7 self-management accords have been concluded at an estimated cost of 1,167.1 million dinars, and the share of the fund is 256.6 million dinars. Three new construction projects will be built at an estimated cost of 544.4 million dinars (the pooled capital of the fund amounts to 145.2 million dinars). Three economic projects will consist of reconstruction and modernization, involving an expenditure of 590 million dinars (the share of the fund is 91.9 million dinars).

The estimated cost stated in four self-management accords concluded in Macedonia is 220.6 million dinars, and the share of the fund is 98.8 million dinars. All the accords are based on credit. Two new projects will be built with an estimated cost of 110.4 million dinars (share of the fund 49.7 million dinars). Two accords have been concluded for reconstruction and modernization with an estimated cost of 110.2 million dinars, in which the share of the fund is 49.1 million dinars.

Only one self-management accord has been concluded in the first 4 months in Montenegro. This is for reconstruction and modernization of the "Obod" plant for making washing machines with an estimated cost of 954.2 million dinars, in which the fund's pooled capital will have a share of 296.6 million dinars.

The orientation of organizations of associated labor of the advanced and economically underdeveloped regions, to continue in the future to realize directly—through pooling—their interests in reproduction and income, indicates that associated labor is assuming a greater role and more responsibility in carrying out the agreed policy concerning development of the economically underdeveloped.

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## DEVELOPMENT PLANS FOR 1986-2000 PERIOD

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 25 Jul 84 p 7

[Article prepared by Katarina Sekulic: "The Main Guideline—Higher Productivity"]

[Text] The views adopted in the long-range stabilization program served in turn as the point of departure for preparing the draft of the Long-Range Social Plan of Yugoslavia Over the 1986-2000 Period, above all those whose point of departure is the need for increasing the economy of labor, resources, production and business operation. That is, it is estimated that labor productivity over the next 15 years could increase at an average annual rate of higher than 3 percent, and in the last decade about 4 percent, which would be crucial to overall development as well as development in individual sectors. In the first estimates of long-term development it was noted that the national income (ukupan drustveni proizvod) could grow at an average annual rate of 5.2 percent, while at the same time its share in the gross social product would increase more than one-fourth. Specifically, from 42 to 54 percent.

Industrial output should increase at an annual rate of 6.2 percent and agricultural output at a rate of 3.5 percent. It is estimated at the same time that exports of goods and services could increase in real terms at a rate of about 6 percent, and imports about 5 percent, so that at the end of the planning period their share in the social product would reach about 30 percent. It should be borne in mind in this connection that the initial year, 1985, was estimated by taking the real export and import relationships in 1983. The fuller effects of the revaluation and larger amounts of depreciation set aside were taken into account in order to preserve the real value of fixed capital. In that context it is estimated that the average life of capital assets should drop from its present level of 21 years to 10 years in the year 2000.

Particular attention in a draft which incidentally is sizable, running to about 160 pages, from which we are merely abstracting some basic estimates, is devoted to the development of activities of common interest. That section envisages that the average annual growth rate of the fuel and power industry could be about 7 percent and coal production and consumption about 9 percent. Production of domestic raw petroleum could increase, according to the

computations to date, at a rate of 3.2 percent and that of natural gas 6.3 percent. It is noted in this connection that the share of imports in total consumption of primary energy will drop from 38.3 percent in 1980 to 22 percent in the year 2000.

As for basic raw materials, conditions are again being promised which are supposed to facilitate their more rapid development. Thus it is noted that all the necessary conditions will be created for faster development of the production of basic metals—iron, steel, aluminum, copper, lead and zinc. The approximately threefold growth in steel production should guarantee more stable supply of these products to the domestic market.

As for agriculture, which has a distinguished place in this document, it is stated that wheat production should stabilize between 6 and 7 million tons a year and purchases at a level of at least 70 percent of the harvest. Corn production would increase at the same time to 20 million tons, whereby more normal conditions would be created for development of animal husbandry and the growth of exports. Sugar production should reach about 1.25 million tons a year, and edible oil about 450,000 tons.

Total employment in the country could increase, in the opinion of the planners, by about 3 million people, which means that in the year 2000 we would have an employed labor force of about 11 million. These predictions are based on a projected growth rate of total employment of over 2 percent, and over 1 percent in the private sector.

The planners estimate that it is possible to achieve a growth of total real personal consumption of the population at an annual rate of about 4.9 percent. This growth would be made possible by a corresponding increase in purchasing power and commodity stocks. Real personal incomes would increase at a rate of about 5 percent.

These estimates have yet to be verified, but even now it can be said that there will be many objections to certain of the predictions, since the tasks in the document mentioned are drawn from the Long-Range Stabilization Program, which is quite understandable, but still it is forgotten that the first part of its implementation is seriously behind schedule.

[Box]

#### Costs and Output

Milos Sindjic, director general of the Federal Bureau for Social Planning, recently pointed out in the SFRY Assembly that for years we have not been increasing the relative surplus product, achieving between 1.2 and 1.4 dinars of the surplus product per dinar of personal income, which is obviously inefficient for the growing needs and risks of the period in which we live.

Material costs now amount to about 60 percent of the gross social product, and their share must be reduced: from about 57.5 percent in 1985 to about 54 percent in 1990, or by at least 6 percent.

Given these and other qualitative changes, a growth of the social product of more than 50 percent would result from conservation of resources and labor productivity, which has long been the aim. That is why Sindjic especially emphasizes that it is indispensable to produce considerably more with approximately the same quantity of resources and energy, and at the same time to reduce material costs per unit output, which leads toward a rise in the technological level of the Yugoslav economy.

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## 'SECOND ROUND' IN FINANCIAL CONSOLIDATION

Zelgrade PRIVREDNI PREGLED in Serbo-Croatian 31 Jul 84 p 1

[Article by Lj. Barjaktarevic: "Summer Without a Breathing Space"]

[Text] If one is to judge by the package of enactments which the Federal Executive Council has sent or is about to send to the Yugoslav Assembly, representing the "second round" of financial consolidation, at least for the delegates the summer has every chance of being hot—and without a breathing space, when often the summer on the calendar leaves even people accustomed to weather forecasts in a quandary. It is well known even today that the effects of the first measures to take the burden off the economy will weigh 85 billion instead of the estimated 70 billion dinars, which, to tell the truth, is no consolation whatsoever to the economy, burdened with a lack of money that is already chronic, but for a beginning it certainly should not be underestimated. Especially since there will also follow other measures pertaining to the system which are supposed to back up the effects of the measures which are already under way and to create a basis for more optimum and efficient economic activity more in line with economic logic.

These measures undoubtedly include changes in the Law on Depreciation, and the solutions which the FEC is now offering differ essentially not only from the legislation now in effect, but also from the Law on Associated Labor itself, which will not be at all to the liking of the "rigid" opponents of its being revised at all. That is, the FEC is now proposing that all depreciation be charged to gross income, which as a practical matter would set up the only possible obstacle to depreciation of the capital invested. In the coming debate of this proposal, which will probably be a fierce one, another position will have to be worked out in the end: either to amend the Law on Associated Labor and accordingly the legislation, or simply in a new federal law to put that solution into effect and apply it in principle, confirming it in an act adopted subsequently, which is in fact possible in formal law. Incidentally, if the Law on Associated Labor itself were applied as conceived with respect to depreciation, there would most likely not have been any problems. After all, even when the Law on Associated Labor was enacted it was not assumed that everyone would opt for the minimum rate of depreciation, which does not cover even reimbursement of costs, and that the normal depreciation would be provided for only from income.

The new accounting law has been rather long in preparation, and after numerous debates and very harsh and documented exchanges of fire over the essential issues, in which the leitmotif has always been how to reimburse the dinar equivalent of foreign currencies, the text of the new proposal has in fact been prepared. However, the FEC itself has stated that the job is not done since it has offered certain innovations in the section concerning interest rates. The solution which now claims acceptance is for interest on short-term credits to be charged to gross income, and interest on medium-term and long-term credits from income—would not be easy to defend from the economic standpoint. The federal government takes as its point of departure the definition that interest is a part of income, so that it is clear how it has to be reimbursed. To be sure, the problem is that it has even been included in the tax base, and at a time when the economy is over indebted, one can imagine how extremely unpopular that kind of solution is. It is also in the light of that fact that one should make a judgment in weighing the proposal of the FEC that interest should be removed from income before the tax base is ascertained.

It is quite certain that today differences in rates of exchange are the most acute problem in the conduct of economic activity, a problem that in its proportions threatens in the future to confuse computations in the items in the balance sheets of organizations. At the beginning of 1984 differences in rates of exchange were calculated to be 1,300 billion dinars, and by the end of the year it is estimated that they will reach 2,050 billion, or slightly more than a fourth of the anticipated social product. Just as it is beyond dispute that differences in rates of exchange are an integral part of the conduct of economic activity, it now equally appears that the solution which will be offered in the specific law, which has been carefully prepared and already brought to a conclusion in the competent department of the FEC—is that the differences in the rate of exchange must be borne by whoever is using the foreign exchange. Since income is already burdened, it is realistic to expect that this immense financial, but also political, and indeed even social welfare operation cannot be carried out immediately. That is why it is being proposed that differences in rates of exchange be expensed, certainly to a more reasonable time than the 20-30 years people would like. Among other things the law calls for a new method of coverage—in organizations, say, the transition to current billing instead of the present principle of collection.

As matters now stand, the other two agreements which claim to offer a tax reform are now in the final phase; opportunities have thereby been created to undertake a new policy and system in this field beginning next year. The long tug-of-war over the dilemma about whether the tax base should be the total income of organizations or that portion which remains after deductions has finally been resolved by adopting the latter version. So, the base for the income tax of organizations will consist of income with certain deductions (conventional personal income per worker rather than the actual income in the republics and provinces), and in practice it comes down to net income.

All in all, a pile of work which should be completed as soon as possible regardless of how serious it is. After all, aside from the fact that these measures are quite far behind schedule, it also must not be forgotten that the very situation in the economy with respect to its solvency demands that they be passed as urgently as possible.

STATUS OF FOREIGN EXCHANGE POLICY DISCUSSED

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 28-30 Jul 84 p 6

[Article by S. Jankovic: "Time To Adjust the Rights and the Inflow"]

[Text] So far implementation of the Law on Foreign Exchange Transactions this year has yielded results which were in part satisfactory--this was the official assessment recently presented in the SFRY Assembly. The trouble lies in the second part, where even such important provisions as the one about the operation of the foreign exchange market were hardly carried out at all. Nevertheless, the view is that no change of any great extent should be undertaken in foreign exchange policy. On the contrary, the greatest potential in this area lies precisely in strict implementation of the law.

This year, that is, trends are more favorable with respect to the inflow of foreign exchange. That is encouraging. Especially since tardiness in paying the country's obligations which have come due was eliminated on the basis of that inflow and the Law on Convertible Payments. At the same time, borrowing abroad has been brought into line with the requirements of the Long-Range Economic Stabilization Program.

Nevertheless, the fact that the implementation of the law so far has not fully managed to put life in the foreign exchange market is just as disturbing as it was last year. On the contrary. It is true that it is functioning in certain segments, above all among members of certain commercial banks and through sales of the National Bank of Yugoslavia, but primarily for purposes established in advance. More than half of the inflow of convertible currencies is set aside for them in the National Bank of Yugoslavia. Since the arrangements contained in the law presuppose operation of the foreign exchange market as a complete mechanism, the law's implementation in that sense has yet to begin.

It would be wrong to underestimate the importance of this task. Which is why additional measures are being envisaged both on the part of the competent authorities in the Federation, especially the control authorities, and also on the part of organizations of associated labor and the commercial banks. This, of course, presupposes far greater efforts in augmenting production for export. A serious effort is also being made to prevent broader requests for postponement of bringing foreign exchange into the country. The penalties



have been set forth as part of credit policy measures in cases when foreign exchange is held beyond the periods allowed by law. Certainly the greatest expectations in this regard are placed on the Federal Foreign Exchange Inspectorate and the inspectors of the National Bank. Their report will be debated in the Yugoslav Assembly.

Nevertheless, certain changes of an essential nature have also been announced. An analysis of the law's implementation has shown that on the basis of the methodology that was adopted considerably greater rights have been issued to cover the socially recognized needs in reproduction called for by the law than the actual inflow of foreign exchange affords. It is clear that those rights have to be adjusted to the real inflow. This applies to reducing rights on the basis of refinancing principal, the taking of commodity credits, compensation transactions and transfer of rights from past years.

Self-management accords in all the general associations of the Economic Chamber of Yugoslavia have regulated in good time the ascertainment of socially recognized needs in reproduction—individually and strictly, on the basis of the uniform criteria for the individual organization of associated labor. In several cases, however, differing percentages have been ascertained in forms of association and linkage for individual members on the basis of special criteria in the self-management accord which they signed. To be sure, they were within the limits of the uniform criteria. It is just that the impression remains that the ascertainment of needs did after all travel on different tracks in different places. A hot debate, then, is anticipated in the Yugoslav Community of Interest for Foreign Economic Relations at the meeting announced for 1 August, when the process of reducing foreign exchange rights to the limits of the available foreign exchange will begin.

Further actions which have been envisaged are supposed to correct certain tardiness in preparing the implementing regulations of the Foreign Exchange Law, especially with respect to foreign exchange savings. A program for encouraging this saving is expected soon, especially special-purpose savings for Yugoslavs employed abroad temporarily, for investment in the small business sector, in agriculture, and to solve housing problems.

The basic problem, however, will remain the same as before—solutions have not been found for firmer linkage of the economy on the basis of income sharing and for the creation of new export programs. Previous relationships are even being severed. The internal guidance of exports into compensation transactions and local border traffic is also causing a great deal of trouble. The measures taken are aimed at resolving this situation not with the intention of reducing export efforts, but with the intention of regulating new transactions so that they conform to the provisions of the law.

The results will show how good the measures taken are, and that before the end of the year.

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12 Sept 84